

1
2 IN THE UNITED STATES DISTRICT COURT
3 FOR THE DISTRICT OF MINNESOTA

4 -----x
5 IN RE: VIAGRA PRODUCTS
6 LIABILITY LITIGATION

MDL NO. 1724

7 This document pertains
8 to ALL CASES
-----x

Judge Paul A.
Magnuson

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10
11 THE VIDEOTAPED DEPOSITION OF

12 HOWARD POMERANZ, M.D., taken before Eileen
13 Mulvenna, CSR/RMR, Certified Shorthand Reporter,
14 Registered Merit Reporter and Notary Public of
15 the State of New York, commencing at 8:34 a.m.,
16 June 8, 2007, at 425 Park Avenue, New York, New
17 York.
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<p>1 2 APPEARANCES: 3 4 ATTORNEYS FOR PLAINTIFFS: 5 6 BECNEL LAW FIRM 106 West Seventh Street 7 Reserve, Louisiana 70084 8 BY: DANIEL E. BECNEL, JR., ESQ. 9 10 -and- 11 LAW OFFICES OF RONNIE G. PENTON 209 Hoppen Place Bogalusa, Louisiana 70427 12 BY: RONNIE G. PENTON, ESQ. 13 14 ATTORNEYS FOR DEFENDANT PFIZER: 15 KAYE SCHOLER 425 Park Avenue New York, New York 10022-3598 16 BY: LORI B. LESKIN, ESQ. AVIGAEEL CYMROT, ESQ. 17 18 -and- 19 MALINI MOORTHY, ESQ. Corporate Counsel, Pfizer, Inc. 235 East 42nd Street 20 New York, New York 10017 21 22 COURT-APPOINTED JOHN W. BORG, ESQ. SPECIAL MASTER: 6612 Limerick Drive Edina, Minnesota 55439 23 24 VIDEOGRAPHER: CHRISTOPHER MARTIN ALSO PRESENT: ALON HARRIS, Ph.D. 25 JOHN GAMEL, M.D.</p>	<p>2 1 - Proceedings - 2 THE VIDEOGRAPHER: We're on the 3 record. 4 Today's date is June 8, 2007. The 5 time is 8:34 a.m. This is the videotape 6 deposition of Dr. Howard Pomeranz in the 7 case of In Re: Viagra Products Liability 8 Litigation, MDL No. 1724. Case filed in 9 the U.S. District Court, District of 10 Minnesota. We're at the offices of Kaye 11 Scholer, 425 Park Avenue, New York, 12 New York. 13 The videographer is Chris Martin and 14 the court reporter is Eileen Mulvenna. 15 We're from Veritext Court Reporting in 16 New York City. 17 At this time, will counsel please 18 introduce themselves for the record. 19 MR. PENTON: Ronnie Penton on behalf 20 of the plaintiffs. 21 MR. BECNEL: Daniel Becnel on behalf 22 of the plaintiffs. 23 MS. LESKIN: Lori Leskin of Kaye 24 Scholer on behalf of Pfizer. 25 MS. CYMROT: Avigael Cymrot on</p>
<p>3 1 2 IT IS HEREBY STIPULATED AND AGREED, 3 by and between the attorneys for the respective 4 parties herein, that filing and sealing be and 5 the same are hereby waived. 6 7 IT IS FURTHER STIPULATED AND AGREED 8 that all objections, except as to the form of the 9 question, shall be reserved to the time 10 of the trial. 11 12 IT IS FURTHER STIPULATED AND AGREED 13 that the within deposition may be signed and 14 sworn to before any officer authorized to 15 administer an oath, with the same force and 16 effect as if signed and sworn to before the 17 officer before whom the within deposition was 18 taken. 19 20 21 22 23 24 25</p>	<p>5 1 - Proceedings - 2 behalf of Pfizer. 3 MR. GAMEL: John Gamel on behalf of 4 Kaye Scholer. 5 MR. HARRIS: Ronald Harris on behalf 6 of Kaye Scholer. 7 MS. MOORTHY: Malini Moorthy for 8 Pfizer. 9 THE VIDEOGRAPHER: Will the court 10 reporter please swear in the witness. 11 DR. HOWARD POMERANZ, 12 having been duly sworn by Eileen Mulvenna, 13 a Notary Public of the State of New York, 14 was examined and testified as follows: 15 JUDGE BORG: Dr. Pomeranz, I want to 16 give you a short tutorial on this. 17 As you know, Miss Leskin is going to 18 be asking you questions. If an objection 19 is interposed by either the lawyers on this 20 side or Miss Leskin's side, please don't 21 answer the question until I rule on it and 22 tell you whether or not you can answer. 23 THE WITNESS: Okay. 24 JUDGE BORG: And counsel, rather 25 than speeches, if you have an objection,</p>

<p>1 Howard Pomeranz</p> <p>2 state the ground. We'll deal with it. If</p> <p>3 I don't understand it, I'll tell you I</p> <p>4 don't understand it and we'll make things</p> <p>5 move a whole lot more quickly, I think.</p> <p>6 Dr. Pomeranz, I know you know this,</p> <p>7 but one of sort of the rules of the game,</p> <p>8 if you will, is that this lawyer gets to</p> <p>9 attempt to control you. And that's just</p> <p>10 the way it works.</p> <p>11 And if you feel like you're getting</p> <p>12 cornered on a question and you don't like</p> <p>13 that you're not able to respond to it, the</p> <p>14 attorneys that you are working with here</p> <p>15 will be able to ask you questions later on.</p> <p>16 They're going to get their opportunity to</p> <p>17 do that, but she's going to get to use the</p> <p>18 rules to let her try and control where</p> <p>19 she's going to take you and where you're</p> <p>20 going to take her.</p> <p>21 THE WITNESS: I understand.</p> <p>22 JUDGE BORG: I appreciate that.</p> <p>23 Thank you very much.</p> <p>24 Miss Leskin, go ahead.</p> <p>25 MS. LESKIN: Thank you, Judge Borg.</p>	<p>6</p> <p>1 Howard Pomeranz</p> <p>2 And the first I actually saw the document was on</p> <p>3 Monday.</p> <p>4 Q. When did you first ask for a</p> <p>5 subpoena in this case -- whether a subpoena had</p> <p>6 been served in this case?</p> <p>7 A. I didn't.</p> <p>8 Q. So you said a week ago you asked if</p> <p>9 there had been one. So was that the first time</p> <p>10 you asked about a subpoena?</p> <p>11 A. Yes.</p> <p>12 Q. And prior to you asking, am I right</p> <p>13 that no one told you a subpoena had been served</p> <p>14 for your deposition?</p> <p>15 A. Correct. I just knew the date that</p> <p>16 had been established a few months ago.</p> <p>17 Q. Attachment A to the subpoena asks</p> <p>18 you to bring some documents. And I know that</p> <p>19 we've -- prior to going on the record, you</p> <p>20 provided us with one box of documents that you</p> <p>21 came with today. And to be clear, we understand</p> <p>22 that there may be some medical records of</p> <p>23 patients whose files you've looked at or who</p> <p>24 you've treated or seen within those documents.</p> <p>25 And we will return the originals to</p>
<p>7</p> <p>1 Howard Pomeranz</p> <p>2 (Pomeranz 1, Subpoena, marked for</p> <p>3 identification.)</p> <p>4 EXAMINATION</p> <p>5 BY MS. LESKIN</p> <p>6 Q. Good morning, Dr. Pomeranz. As I</p> <p>7 introduced myself earlier, my name is Lori Leskin</p> <p>8 and I'm counsel for Pfizer in this litigation.</p> <p>9 I want to mark, and I've marked</p> <p>10 before we started, as Exhibit 1 -- we've marked</p> <p>11 as Exhibit 1 a subpoena in a civil case issued to</p> <p>12 you care of Neil Overholtz in this litigation.</p> <p>13 Have you seen this subpoena before?</p> <p>14 A. Yes.</p> <p>15 Q. When is the first time you saw a</p> <p>16 copy of this subpoena?</p> <p>17 A. Monday.</p> <p>18 Q. That wasn't forwarded to you before</p> <p>19 Monday?</p> <p>20 A. No.</p> <p>21 Q. Did anyone tell you a subpoena had</p> <p>22 been served on you prior to Monday?</p> <p>23 A. I don't recall. The first -- I</p> <p>24 asked actually to see it or if it was present,</p> <p>25 because I hadn't received it as of a week ago.</p>	<p>8</p> <p>1 Howard Pomeranz</p> <p>2 you. And if we choose to make copies of any of</p> <p>3 those records, we will redact any patient</p> <p>4 information prior to making any -- as part of the</p> <p>5 copying process, will not keep any patient</p> <p>6 identifying information.</p> <p>7 Is that okay with you?</p> <p>8 A. Yes.</p> <p>9 Q. Were there any subjects within the</p> <p>10 subpoena for which you did not have responsive</p> <p>11 documents?</p> <p>12 A. Well, I think some of these didn't</p> <p>13 apply to me, like Number 15 or 16. So things I</p> <p>14 felt were relevant or I had something to show you</p> <p>15 I brought in.</p> <p>16 Q. So 15, for example, asked for any</p> <p>17 and all opinions or any other documents, such as</p> <p>18 a transcript, where your qualifications as an</p> <p>19 expert witness have been limited or rejected by a</p> <p>20 judicial or administrative tribunal.</p> <p>21 You said that that did not apply to</p> <p>22 you. Is that because no court has so ruled?</p> <p>23 A. Correct.</p> <p>24 Q. Number 16 asks for any and all</p> <p>25 documents relating or concerning any criminal</p>

<p>10</p> <p>1 Howard Pomeranz</p> <p>2 charges against you other than traffic offenses.</p> <p>3 I take it that did not apply to you because there</p> <p>4 have not been any criminal charges filed against</p> <p>5 you?</p> <p>6 A. Correct.</p> <p>7 Q. Were there any other numbers --</p> <p>8 categories of documents of the 18 listed here</p> <p>9 that also you felt did not apply to you?</p> <p>10 A. Let's see. Number 14, I'm not</p> <p>11 associated with any kind of referral or witness</p> <p>12 group or something like that, so it doesn't</p> <p>13 apply.</p> <p>14 Number 13, I don't have a website,</p> <p>15 don't advertise or anything like that.</p> <p>16 And I think that's about it.</p> <p>17 Q. Okay. In providing the documents</p> <p>18 today, did you print out documents from your</p> <p>19 computer?</p> <p>20 A. Yes, I went through yesterday --</p> <p>21 actually took me several hours of doing all</p> <p>22 this -- to find as many e-mails that I could that</p> <p>23 I still had around that I could identify that I</p> <p>24 could provide to you at your request.</p> <p>25 Q. And we appreciate that. Thank you.</p>	<p>12</p> <p>1 Howard Pomeranz</p> <p>2 corrected version I sent moments after</p> <p>3 sending the original one correcting a</p> <p>4 typographical error simply was a listing of</p> <p>5 documents we intended to use.</p> <p>6 MR. BECNEL: I didn't get the</p> <p>7 original one. The only one I got is the</p> <p>8 corrected version.</p> <p>9 BY MS. LESKIN:</p> <p>10 Q. I've provided you a document we've</p> <p>11 marked as Exhibit 2, which appears to be your CV.</p> <p>12 And it's dated as of April 9, 2007.</p> <p>13 (Pomeranz 2, CV of Howard Pomeranz,</p> <p>14 marked for identification.)</p> <p>15 Q. Is this full and complete, to the</p> <p>16 best of your knowledge?</p> <p>17 A. Yes.</p> <p>18 Q. Have you had any additional</p> <p>19 publications published since April 9, 2007?</p> <p>20 A. Let me just look.</p> <p>21 (Witness peruses the exhibit.)</p> <p>22 A. Yes, I believe there's another</p> <p>23 research paper that was published beyond what's</p> <p>24 there on page 9 that -- halfway down the page. I</p> <p>25 think it probably got published after the date of</p>
<p>11</p> <p>1 Howard Pomeranz</p> <p>2 We'll go through some of those documents as we go</p> <p>3 through the course of the day.</p> <p>4 MR. BECNEL: Miss Leskin, just to</p> <p>5 make the record complete, I notice that the</p> <p>6 deposition notice was sent out on 4/3/2007</p> <p>7 and the amended deposition notice was sent</p> <p>8 out on Tuesday June 5th of '07.</p> <p>9 MS. LESKIN: I'm sorry, where do you</p> <p>10 see an amended deposition notice on</p> <p>11 June 5th?</p> <p>12 MR. BECNEL: It came from you. It's</p> <p>13 a corrected version.</p> <p>14 MS. LESKIN: Well, let's be clear</p> <p>15 what you're looking at. What you're</p> <p>16 looking at is my e-mail to you which</p> <p>17 identified for you the documents we</p> <p>18 reasonably expect to use during the course</p> <p>19 of Dr. Pomeranz's deposition, which is --</p> <p>20 as you are well aware of by court order, we</p> <p>21 are required to provide counsel five</p> <p>22 business days prior to the deposition a</p> <p>23 listing of documents we expect to use.</p> <p>24 That's not in any way a request for</p> <p>25 documents from the witness. And the</p>	<p>13</p> <p>1 Howard Pomeranz</p> <p>2 the CV, and it most likely is in one of the</p> <p>3 folders that I gave you.</p> <p>4 Q. What article was that?</p> <p>5 A. It was another research article on</p> <p>6 the rodent model of ischemic optic neuropathy.</p> <p>7 Q. What journal was that published in?</p> <p>8 A. Wait a minute. Actually -- no --</p> <p>9 actually, I'm sorry. It's here. One of them was</p> <p>10 in 2006, one was in -- actually, that's the last</p> <p>11 one that's -- yeah, I'm sorry. That's a mistake.</p> <p>12 Q. Those are the two articles with</p> <p>13 Danylkova as the lead author?</p> <p>14 A. Correct.</p> <p>15 Q. So with that correction, there are</p> <p>16 no additional articles you published since April?</p> <p>17 A. That's right.</p> <p>18 Q. Okay. Have you had your deposition</p> <p>19 taken before, Dr. Pomeranz?</p> <p>20 A. Yes.</p> <p>21 Q. How many times?</p> <p>22 A. Actually, I think I gave you a sheet</p> <p>23 that said how many times with the cases, but</p> <p>24 probably maybe five or six times, something like</p> <p>25 that.</p>

4 (Pages 10 to 13)

<p>14</p> <p>1 Howard Pomeranz</p> <p>2 Q. And those were all in your role as a</p> <p>3 an expert witness?</p> <p>4 A. Yes.</p> <p>5 Q. And none of those cases, as I</p> <p>6 recall, involved sildenafil; is that right?</p> <p>7 A. That's right.</p> <p>8 Q. Did any of those cases involve</p> <p>9 ischemic optic neuropathy?</p> <p>10 A. I don't believe so. I think they</p> <p>11 were other neuro-ophthalmic or orbital types of</p> <p>12 diagnoses.</p> <p>13 Q. The document you gave us as part of</p> <p>14 your expert report in this case lists five cases</p> <p>15 in which you appeared to have given a deposition</p> <p>16 and three that have gone to trial.</p> <p>17 A. Right.</p> <p>18 Q. On these five cases in which you</p> <p>19 gave a deposition, were those medical malpractice</p> <p>20 cases? Were they product liability cases? Do</p> <p>21 you --</p> <p>22 A. Can I just see it to refresh my</p> <p>23 memory?</p> <p>24 Q. Absolutely. In fact, let's mark the</p> <p>25 two pages as an exhibit.</p>	<p>16</p> <p>1 Howard Pomeranz</p> <p>2 details, Doctor. Those three are all medical</p> <p>3 malpractice cases; correct?</p> <p>4 A. Yes.</p> <p>5 Q. And the five depositions, are those</p> <p>6 also -- there may be duplication in there.</p> <p>7 A. One of them was a workers' comp.</p> <p>8 That was Number 2. And the others were</p> <p>9 malpractice-related cases, yes.</p> <p>10 Q. Any malpractice-related cases</p> <p>11 involve doctors who had prescribed a drug</p> <p>12 improperly?</p> <p>13 A. Yes, Number 4.</p> <p>14 Q. What's the caption of that case?</p> <p>15 A. Mark Haigh, Mark and Susan</p> <p>16 Beckstrand versus Shopko involved a prescription</p> <p>17 of a drug. I don't remember the name of it off</p> <p>18 the top of my head. It's been a while. But was</p> <p>19 involved with whether improper dose had been</p> <p>20 administered to somebody.</p> <p>21 Q. What was the injury alleged in that</p> <p>22 case?</p> <p>23 A. It was vision loss, I believe.</p> <p>24 Q. And what was the opinion that you</p> <p>25 rendered in that litigation?</p>
<p>15</p> <p>1 Howard Pomeranz</p> <p>2 (Pomeranz 3, Medical Malpractice</p> <p>3 Expert Witness Cases that have gone to</p> <p>4 trial by Dr. Pomeranz, marked for</p> <p>5 identification.)</p> <p>6 MS. LESKIN: I will get you a copy.</p> <p>7 I don't have a copy.</p> <p>8 MR. BECNEL: No problem.</p> <p>9 A. Let's see. First case --</p> <p>10 Q. Which case is that?</p> <p>11 A. Number 1, medical malpractice,</p> <p>12 Roegge Meahger & Geer, I believe -- yes, all</p> <p>13 three of these were malpractice cases. Two --</p> <p>14 Q. I'm sorry. Those are the cases that</p> <p>15 went to trial; correct?</p> <p>16 A. That went to trial, right.</p> <p>17 Q. Those are all medical malpractice</p> <p>18 cases?</p> <p>19 A. Two of them where I was on the side</p> <p>20 for the physician who was being sued. And then</p> <p>21 the third one, Number 3, the Bailey attorney with</p> <p>22 the Cutlip versus Mayer, was on the side of a</p> <p>23 patient who was suing a physician over refractive</p> <p>24 surgery.</p> <p>25 Q. I don't necessarily need to know the</p>	<p>17</p> <p>1 Howard Pomeranz</p> <p>2 A. Let me think about it.</p> <p>3 Q. Well, let me --</p> <p>4 A. If I remember correctly, I think it</p> <p>5 was -- the crux of the case was that the</p> <p>6 medication that was prescribed had something to</p> <p>7 do with a visual problem the patient had. And I</p> <p>8 felt that there was not a connection that it was</p> <p>9 dose-related or something related -- I don't</p> <p>10 remember the exact details.</p> <p>11 Q. So was your testimony related to the</p> <p>12 standard of care for the physician, or was your</p> <p>13 testimony related to the causality as between the</p> <p>14 medication and the injury?</p> <p>15 A. The latter, the causality.</p> <p>16 Q. Can you describe for me the nature</p> <p>17 of your practice right now?</p> <p>18 A. I'm a full-time practicing physician</p> <p>19 employed by North Shore Long Island Jewish Health</p> <p>20 System out on Long Island. And I see a mixture</p> <p>21 of general ophthalmology patients and patients</p> <p>22 with neuro-ophthalmic problems.</p> <p>23 I'm involved in teaching and</p> <p>24 training residents in the ophthalmology residency</p> <p>25 training program there as well as medical</p>

<p>18</p> <p>1 Howard Pomeranz</p> <p>2 students and residents in other programs at the</p> <p>3 hospital too besides ophthalmology.</p> <p>4 Q. How many hours do you spend each</p> <p>5 week seeing patients?</p> <p>6 A. Pretty much full-time. Nine to five</p> <p>7 pretty much. Four to five days a week.</p> <p>8 Q. How much time do you spend teaching?</p> <p>9 A. Well, some of the teaching is</p> <p>10 coincidental with that because we have residents</p> <p>11 who spend time with us while seeing patients. So</p> <p>12 it's hard to dissect all that.</p> <p>13 But I also am in charge of seeing</p> <p>14 consultations in the hospital and, after seeing</p> <p>15 patients in the office, go with the residents to</p> <p>16 see patients in the hospital, usually several</p> <p>17 hours a week. And I'm involved in giving</p> <p>18 lectures and teaching as well.</p> <p>19 Q. That was my next question.</p> <p>20 Do you give any classes or seminars?</p> <p>21 A. Yes -- well, part of any resident's</p> <p>22 curriculum are certain number of hours of</p> <p>23 didactics and lectures and teaching, which I'm</p> <p>24 involved in as well.</p> <p>25 Q. Is there a specific course that you</p>	<p>20</p> <p>1 Howard Pomeranz</p> <p>2 training program, but not a formal course as part</p> <p>3 of the university?</p> <p>4 A. Correct.</p> <p>5 Q. When you were at the University of</p> <p>6 Maryland, did you teach a course as opposed to</p> <p>7 just giving lectures?</p> <p>8 A. No, just the same as the others.</p> <p>9 Q. Do you do any research as part of</p> <p>10 your duties right now?</p> <p>11 A. Currently, no. Because of -- my</p> <p>12 time as a full-time clinician where I am now</p> <p>13 really doesn't allow me to do that; but when I</p> <p>14 was in Minnesota, I had the opportunity to do</p> <p>15 that.</p> <p>16 Q. Have you ever conducted any clinical</p> <p>17 trials? I'm specifically looking at clinical</p> <p>18 trials where you're comparing a group of patients</p> <p>19 taking a drug versus a group of patients not</p> <p>20 taking a drug. So any clinical trials on Viagra?</p> <p>21 A. Not on Viagra. But I've been</p> <p>22 involved in clinical trials that other</p> <p>23 neuro-ophthalmologists have been involved in that</p> <p>24 are multicenter trials of different sorts. Two</p> <p>25 of or three of them I've been involved in.</p>
<p>19</p> <p>1 Howard Pomeranz</p> <p>2 teach currently?</p> <p>3 A. I teach about neuro-ophthalmology.</p> <p>4 I basically give lectures about</p> <p>5 neuro-ophthalmology diagnosis, patient</p> <p>6 management, things of that sort.</p> <p>7 Q. Is that a specific course or is that</p> <p>8 just lectures that you give during the course of</p> <p>9 your --</p> <p>10 A. Lectures that I've given.</p> <p>11 Q. So you don't have any specific</p> <p>12 course that you teach right now?</p> <p>13 A. Correct.</p> <p>14 Q. When you were at the University of</p> <p>15 Minnesota, did you have any courses that you</p> <p>16 taught?</p> <p>17 A. Only as much as what was part of the</p> <p>18 residents' education there. And I have a series</p> <p>19 of prepared lectures and a binder that has</p> <p>20 assigned articles for the residents to read. I</p> <p>21 don't know if you really want to call that a</p> <p>22 course as opposed to just reading assignments for</p> <p>23 discussion and learning for the residents in the</p> <p>24 training program.</p> <p>25 Q. That was for the residents in the</p>	<p>21</p> <p>1 Howard Pomeranz</p> <p>2 Q. My question was much more limited.</p> <p>3 Have you done any clinical trials on</p> <p>4 Viagra?</p> <p>5 A. No.</p> <p>6 Q. Have you done any clinical trials on</p> <p>7 any other PDE5 inhibitor?</p> <p>8 A. No.</p> <p>9 Q. Have you done any studies in animals</p> <p>10 using sildenafil?</p> <p>11 A. No.</p> <p>12 Q. Have you done any studies in animals</p> <p>13 using any other PDE5 inhibitor?</p> <p>14 A. No.</p> <p>15 Q. Have you done any studies measuring</p> <p>16 blood flow to the ocular vessels?</p> <p>17 A. Not in any direct way. Though some</p> <p>18 of the research that I did in Minnesota involved</p> <p>19 an animal model for ischemic optic neuropathy</p> <p>20 where we were inducing changes in blood flow in</p> <p>21 that model, but we weren't measuring changes in</p> <p>22 blood flow as a part of that model. It wasn't</p> <p>23 one of the objects of the research.</p> <p>24 Q. Is that the model that's commonly</p> <p>25 called now the Bernstein rat model?</p>

6 (Pages 18 to 21)

<p style="text-align: right;">22</p> <p>1 Howard Pomeranz</p> <p>2 A. Yes.</p> <p>3 Q. So then, just to be clear, you have</p> <p>4 not done any studies measuring ocular blood flow?</p> <p>5 A. Correct.</p> <p>6 Q. I would take it, then, that you</p> <p>7 haven't done any studies measuring ocular blood</p> <p>8 flow following use of sildenafil?</p> <p>9 A. Correct.</p> <p>10 Q. Have you any studies measuring blood</p> <p>11 flow following the use of sildenafil to any other</p> <p>12 part of the body?</p> <p>13 A. No.</p> <p>14 Q. Have you yourself done any</p> <p>15 epidemiological studies?</p> <p>16 A. No.</p> <p>17 Q. Have you conducted any studies on</p> <p>18 male erectile dysfunction?</p> <p>19 A. No.</p> <p>20 Q. Have you done any research on the</p> <p>21 relationship between erectile dysfunction -- on</p> <p>22 the relationship, if any, between erectile</p> <p>23 dysfunction and ischemic optic neuropathy?</p> <p>24 A. Other than the case reports that</p> <p>25 I've published, no.</p>	<p style="text-align: right;">24</p> <p>1 Howard Pomeranz</p> <p>2 of Minnesota letterhead.</p> <p>3 Q. Yes, I think I saw it before.</p> <p>4 Is this the document you were</p> <p>5 referring to?</p> <p>6 A. Yes.</p> <p>7 MS. LESKIN: We'll mark that as an</p> <p>8 exhibit.</p> <p>9 Q. Do you mind if I mark the original?</p> <p>10 A. No, that's okay.</p> <p>11 (Pomeranz 4, Memorandum dated April</p> <p>12 7, 2004, to Attorneys from Pomeranz, marked</p> <p>13 for identification.)</p> <p>14 MS. LESKIN: We're marking as</p> <p>15 Pomeranz Exhibit 4 a memorandum on</p> <p>16 University of Minnesota letterhead dated</p> <p>17 April 7, 2004, to attorneys from Howard</p> <p>18 Pomeranz, M.D., re list of attorneys with</p> <p>19 clients with Viagra/NAION cases.</p> <p>20 Q. And I'll show that to you. That's</p> <p>21 the list you were referring to; correct?</p> <p>22 A. That's right.</p> <p>23 Q. And as of 2004, how many of those</p> <p>24 attorneys had you actually looked at cases for?</p> <p>25 A. All of them.</p>
<p style="text-align: right;">23</p> <p>1 Howard Pomeranz</p> <p>2 Q. In the documents that you provided</p> <p>3 us today, there is a lot of correspondence</p> <p>4 between you and various attorneys about potential</p> <p>5 litigation involving Viagra or other PDE5</p> <p>6 inhibitors and ischemic optic neuropathy.</p> <p>7 When was the very first time you can</p> <p>8 recall being contacted by an attorney in</p> <p>9 connection with such litigation?</p> <p>10 A. Probably around the time that my</p> <p>11 first case series was published.</p> <p>12 Q. The first case series or the first</p> <p>13 case report?</p> <p>14 A. The first case series, which I</p> <p>15 believe was in 2001. And around that time, I</p> <p>16 don't remember if it was just before or sometime</p> <p>17 after, somewhere around 2001, 2002, I started to</p> <p>18 receive some inquiries.</p> <p>19 Q. Do you remember who the first</p> <p>20 attorneys you were -- you spoke with?</p> <p>21 A. No, but I think I gave you a list</p> <p>22 of -- I think around that time, when I was at</p> <p>23 Minnesota, of a number of attorneys who had</p> <p>24 contacted me. I don't remember who contacted me</p> <p>25 first, but it's on the list. It's on University</p>	<p style="text-align: right;">25</p> <p>1 Howard Pomeranz</p> <p>2 Q. And how many of those attorneys had</p> <p>3 you actually given opinions to?</p> <p>4 A. Two or three of them. And I think</p> <p>5 those were the affidavits that I gave you copies</p> <p>6 of that were relevant.</p> <p>7 Q. The first name on the list is Ronald</p> <p>8 Benjamin. When was the last time you spoke with</p> <p>9 Mr. Benjamin?</p> <p>10 A. Probably three, four years ago.</p> <p>11 Q. What material did Mr. Benjamin give</p> <p>12 you in connection with the case he was working</p> <p>13 on?</p> <p>14 A. Medical records.</p> <p>15 Q. Do you remember the patient's name?</p> <p>16 A. No.</p> <p>17 Q. Does Lloyd Livingston sound</p> <p>18 familiar?</p> <p>19 A. That may be it. Actually, I don't</p> <p>20 have on this list the name of the patient who</p> <p>21 goes with each one, so --</p> <p>22 Q. Okay.</p> <p>23 (Pomeranz 5, Plaintiff's Expert</p> <p>24 Disclosure pursuant to CPLR SEC. 3101(d),</p> <p>25 marked for identification.)</p>

<p>26</p> <p>1 Howard Pomeranz</p> <p>2 MS. LESKIN: We've marked as</p> <p>3 Exhibit 5 the document entitled,</p> <p>4 "Plaintiff's Expert Disclosure Pursuant to</p> <p>5 CPLR Section 3101(d)" in the case entitled,</p> <p>6 "Lloyd Livingston versus Pfizer," Supreme</p> <p>7 Court of the State of New York.</p> <p>8 Q. Have you ever seen this document</p> <p>9 before?</p> <p>10 A. No.</p> <p>11 Q. And if you look at paragraph 1,</p> <p>12 Mr. Livingston identified the name of plaintiff's</p> <p>13 expert as Howard Pomeranz. Do you understand</p> <p>14 that the Dr. Pomeranz he's referring to is you?</p> <p>15 A. Yes.</p> <p>16 Q. And in fact, he's attached a copy of</p> <p>17 your CV to this report; correct?</p> <p>18 A. That's it. It's an old one, but</p> <p>19 that's it.</p> <p>20 Q. If you look at the report,</p> <p>21 paragraph 2 says -- actually page 2 says that</p> <p>22 "Dr. Pomeranz will opine that the plaintiff,</p> <p>23 Lloyd Livingston, suffers from a decreased visual</p> <p>24 field in his right eye, which significantly</p> <p>25 impairs his vision in that eye."</p>	<p>28</p> <p>1 Howard Pomeranz</p> <p>2 Viagra and the onset of plaintiff's visual</p> <p>3 impairment, Viagra was a significant factor in</p> <p>4 bringing about the optic neuropathy and resultant</p> <p>5 decreased visual field and visual impairment the</p> <p>6 plaintiff sustained."</p> <p>7 Right?</p> <p>8 A. That's what it says.</p> <p>9 Q. Is that consistent with the opinion</p> <p>10 you provided to Mr. Benjamin about</p> <p>11 Mr. Livingston?</p> <p>12 A. Most likely, yes.</p> <p>13 Q. When you gave this opinion to</p> <p>14 Mr. Benjamin, had you met Mr. Livingston?</p> <p>15 A. No, I just reviewed the records.</p> <p>16 Q. And you reviewed medical records</p> <p>17 provided to you by Mr. Benjamin?</p> <p>18 A. Yes, or someone in his office.</p> <p>19 Q. So you never examined Mr. Livingston</p> <p>20 yourself?</p> <p>21 A. Correct.</p> <p>22 Q. Looking at the bottom of the second</p> <p>23 page, that last paragraph, the disclosure says,</p> <p>24 "Dr. Pomeranz will further testify that he</p> <p>25 arrived at his opinion that the plaintiff</p>
<p>27</p> <p>1 Howard Pomeranz</p> <p>2 Is that the opinion you gave to</p> <p>3 Mr. Benjamin regarding Mr. Livingston?</p> <p>4 A. I'm not sure that I actually wrote a</p> <p>5 written opinion on this, but I think this may be</p> <p>6 one of the cases that may be included in one of</p> <p>7 the case series that I wrote up.</p> <p>8 Q. Looking at the information that is</p> <p>9 in this report, can you determine with any</p> <p>10 certainty whether this is one of the cases in</p> <p>11 your case series?</p> <p>12 A. It doesn't have the patient's age in</p> <p>13 it, so -- it may be, but I'd have to compare it</p> <p>14 to the table that was in one of the -- the second</p> <p>15 case series that had a listing of all the cases</p> <p>16 to see if it matches up.</p> <p>17 I wrote these cases up a number of</p> <p>18 years ago, so unless I go back through all my</p> <p>19 records, I can't remember if it's exactly the</p> <p>20 same person, but it may be.</p> <p>21 Q. Looking at the fourth paragraph on</p> <p>22 the page, the disclosure says, "Dr. Pomeranz will</p> <p>23 opine that given the plaintiff's history of</p> <p>24 hypertension, cup-to-disc ratio, and the temporal</p> <p>25 relationship between the plaintiff's ingestion of</p>	<p>29</p> <p>1 Howard Pomeranz</p> <p>2 sustained this condition secondary to his</p> <p>3 ingestion of Viagra only after carrying out a</p> <p>4 differential diagnosis after which he was able to</p> <p>5 exclude alternative causes of this condition, and</p> <p>6 as such will testify within a reasonable degree</p> <p>7 of medical certainty that Viagra was a</p> <p>8 significant factor in causing plaintiff's optic</p> <p>9 neuropathy and visual impairment."</p> <p>10 Is that consistent with the opinion</p> <p>11 you gave to Mr. Benjamin's office?</p> <p>12 A. Yes, as much as you can extract from</p> <p>13 reviewing the medical records that were provided.</p> <p>14 Q. And sitting here today, do you</p> <p>15 recall what other alternative causes you were</p> <p>16 able to rule out in reviewing Mr. Livingston's</p> <p>17 records?</p> <p>18 A. Well, whenever somebody has an optic</p> <p>19 nerve problem, there are many other things</p> <p>20 besides ischemic optic neuropathy that could be</p> <p>21 the cause. I won't enumerate, but there's</p> <p>22 probably a half a dozen other things that need to</p> <p>23 be eliminated as potential causes of optic nerve</p> <p>24 disease that are considered in any patient that</p> <p>25 presents with visual loss.</p>

8 (Pages 26 to 29)

30

1 Howard Pomeranz

2 Q. You were able to, from looking at

3 the medical records, exclude those as causes of

4 Mr. Livingston's ischemic optic neuropathy?

5 A. Correct.

6 Q. And from reviewing the medical

7 records, were you able to in fact diagnose

8 Mr. Livingston with ischemic optic neuropathy?

9 A. Yes, to the degree that the

10 information was provided to me to be able to do

11 that.

12 Q. And so sitting here today, you don't

13 recall what information was actually provided to

14 you?

15 A. No. I'd have to look through the

16 medical records again. But suffice it to say, if

17 I came to that conclusion, I was -- I felt that I

18 had enough information that was provided to me to

19 make that diagnosis.

20 MR. BECNEL: Lori, are we

21 cross-noticing these in the -- I don't know

22 what's going on in the New York State.

23 This looks like a New York State. Is

24 this --

25 MS. LESKIN: This is an old case.

31

1 Howard Pomeranz

2 It's long since been dismissed.

3 MR. BECNEL: I just don't know about

4 it.

5 MS. LESKIN: Okay.

6 BY MS. LESKIN:

7 Q. Did you receive any compensation

8 from Mr. Benjamin in connection with the work

9 done in the Livingston case?

10 A. Yes.

11 Q. Do you know how much?

12 A. I don't remember. I bill per hour

13 of time that I spend reviewing records. So it

14 might have been a few hours of time most likely.

15 Q. Would you have any records today

16 that revealed how much time you spent on

17 Mr. Livingston's case?

18 A. It may be in the information I

19 provided you, or it might be in the other piles

20 of voluminous material I have in my office that I

21 still haven't combed through.

22 Q. Generally when reviewing these

23 cases, how long does it take you to review the

24 records and come up with an opinion?

25 A. It depends on how much information

32

1 Howard Pomeranz

2 is provided to me. I've had some cases where

3 I've had a stack of paper several inches high,

4 and it takes time to read through all of that.

5 Some of the cases, it's considerably less. So it

6 really depends on how much volume of records it

7 takes to read through.

8 Q. And do you keep track of the time

9 spent on each case by individual files? Do you

10 have a master list for all your litigation cases?

11 How do you keep track of your time?

12 A. Just per case that I review. I just

13 keep track of how much time I've taken reading

14 the records and then how much time I've spent

15 writing up a report if one is requested.

16 Q. Do you have a formal ledger you

17 write this information in or a spreadsheet on

18 your computer?

19 A. No, I just keep track of the time.

20 And then when I'm completed with reviewing the

21 case and writing a report, I'll just create a

22 bill of some sort to send to whoever sent the

23 records to review.

24 Q. In looking -- taking a brief look --

25 and we'll take another look during the break --

33

1 Howard Pomeranz

2 through the documents you provided this morning,

3 I didn't see any other documents referencing the

4 Livingston case. Would you have that back at

5 your office?

6 A. Yes.

7 MS. LESKIN: We would request

8 information regarding the total number of

9 hours you spent and the total money

10 received in connection with the Livingston

11 case.

12 DOCUMENT/DATA REQUESTED:

13 A. If I still have information

14 available, I'll provide it to you. If it was

15 done three, four years ago, I may not have it

16 anymore. If I have it, I'll happily provide it

17 to you.

18 Q. Appreciate it.

19 MR. BECNEL: Just so we get this,

20 this was while you were in Minnesota still?

21 THE WITNESS: Depending on exactly

22 what year it was sent to me. If it was in

23 2001, it might have been while I was still

24 in Maryland, hadn't moved to Minnesota yet.

25 If it was beyond the middle of 2001, then

<p>1 Howard Pomeranz 2 it would have been when I was in Minnesota. 3 BY MS. LESKIN: 4 Q. For the record, the address on your 5 CV is in Baltimore, Maryland. 6 A. Okay. 7 Q. Were you still living in Baltimore 8 at the time you moved to Minnesota or -- your 9 practice to Minnesota or did you -- 10 A. I moved there in July of 2001. 11 Q. So this is dated May of 2001. So 12 that would be -- you would still be at the 13 University of Maryland? 14 A. Right. 15 Q. After providing Mr. Benjamin with 16 this expert opinion, did you have any further 17 contact with Mr. Benjamin? 18 A. No. Other than I recall chasing him 19 down a few times to actually pay me for reviewing 20 his records for him; but other than that, no. 21 (Pomeranz 6, Affidavit of Howard 22 Pomeranz, M.D., Ph.D, dated September 3, 23 2002, marked for identification.) 24 MS. LESKIN: We're marking as 25 Exhibit 6 a document entitled, "Affidavit</p>	<p>34 1 Howard Pomeranz 2 did you first have contact with Miss Littlepage's 3 office regarding David Hall? 4 A. I really don't remember exactly. 5 Probably sometime in the months before this 6 report was written. 7 Q. And did you ever meet Mr. Hall? 8 A. That's a good question. I think if 9 I had examined him, I would have included that in 10 my report. So probably no. I think this was 11 just on the basis of reviewing medical records. 12 Q. In fact, if I represented to you 13 that Mr. Hall has testified that he's never 14 spoken to you, would that be consistent with your 15 recollection? 16 A. Yes. 17 Q. Who provided you with the medical 18 records you reviewed for Mr. Hall? 19 A. Well, I guess, if you look at this 20 list here, if this was from Littlepage in 21 Houston, it would have been this individual named 22 Chetna Gosain. 23 Q. You didn't go get any medical 24 records on your own; right? 25 A. Correct.</p>
<p>35 1 Howard Pomeranz 2 of Howard Pomeranz," dated September 3, 3 2002. 4 Q. Do you recognize this document? 5 A. I do. 6 Q. And I believe, from reading through 7 the context of the text of it, that this was 8 provided for David Hall? 9 A. Correct. 10 Q. David Hall was represented -- or is 11 represented by Zoe Littlepage's office. Were you 12 aware of that? 13 A. Yes. I think that's where the 14 records were sent to me from to review. 15 Q. Have you ever met with 16 Miss Littlepage? 17 A. No. 18 Q. Have you ever met with any attorneys 19 in her office? 20 A. No. 21 Q. Have you ever spoken on the phone 22 with any of the attorneys from her office? 23 A. Perhaps just for them to initially 24 contact me to ask me if I would review the case. 25 Q. How long before September 3, 2002,</p>	<p>37 1 Howard Pomeranz 2 Q. And the records that you list here 3 on paragraph 5, were those the only medical 4 records you reviewed? 5 A. Yes. I think I would have listed 6 everything that they provided to me. 7 Q. Did you ask for any additional 8 medical records? 9 A. Well, I asked them to send me 10 everything that was available. And sometimes 11 when I review the records, if I feel that there's 12 information missing that would be helpful to me 13 in writing the report, for instance, pharmacy 14 records -- sometimes I've asked for pictures of 15 the optic nerve if they were taken in an 16 ophthalmologist's office so I actually see what 17 the optic nerve looked like if a picture was 18 taken at the time the patient was seen. 19 Sometimes that information may not 20 have been provided to me initially and I may have 21 gone back and asked if that was available for me 22 to review so I had a really complete record to 23 review. 24 Q. Were you paid for preparing this 25 affidavit for Mr. Hall?</p>

10 (Pages 34 to 37)

<p>1 Howard Pomeranz</p> <p>2 A. Yes.</p> <p>3 Q. Do you know how much you were paid?</p> <p>4 A. Not off the top of my head, but --</p> <p>5 Q. Can you give me an approximate</p> <p>6 range?</p> <p>7 A. Probably a few thousand dollars,</p> <p>8 based on the number of hours I spent reviewing.</p> <p>9 Q. Do you know how many hours you spent</p> <p>10 reviewing Mr. Hall's records?</p> <p>11 A. I don't recall.</p> <p>12 (Pomeranz 7, Affidavit of Howard</p> <p>13 Pomeranz, M.D., Ph.D, September 30, 2002,</p> <p>14 marked for identification.)</p> <p>15 MS. LESKIN: We're marking as</p> <p>16 Exhibit 7 an affidavit of Howard Pomeranz</p> <p>17 dated September the 30th, 2002, revised</p> <p>18 February 5, 2003, to correct a</p> <p>19 typographical error in Item 16.</p> <p>20 Q. Do you recognize this affidavit?</p> <p>21 A. I do.</p> <p>22 Q. And this, again looking through the</p> <p>23 text, refers to Jimmy Grant; correct?</p> <p>24 A. Correct.</p> <p>25 Q. If I represent to you that Mr. Grant</p>	<p>1 Howard Pomeranz</p> <p>2 medical records you reviewed for Mr. Grant?</p> <p>3 A. Yes. If there were more, I would</p> <p>4 have listed them.</p> <p>5 Q. And those were provided to you by</p> <p>6 Miss Littlepage's office?</p> <p>7 A. Correct.</p> <p>8 Q. Were you paid for preparing this</p> <p>9 report for Jimmy Grant?</p> <p>10 A. Yes.</p> <p>11 Q. Do you know how much you were paid?</p> <p>12 A. Again, don't recall the exact</p> <p>13 figure. But it's probably something on the same</p> <p>14 order as with Mr. Hall's records.</p> <p>15 Q. Do you have records back in your</p> <p>16 office or in your home office that would indicate</p> <p>17 the amount of hours you spent on either Mr. Hall</p> <p>18 or Mr. Grant's records?</p> <p>19 A. Yes. If I still have the bill that</p> <p>20 I generated, usually it will say on there the</p> <p>21 hourly rate times number of hours for the amount.</p> <p>22 So it would indicate how many hours I spent on</p> <p>23 it.</p> <p>24 MS. LESKIN: We would make the</p> <p>25 request for any records you still have</p>
<p>1 Howard Pomeranz</p> <p>2 is also represented by Miss Littlepage's office,</p> <p>3 would that be consistent with your recollection?</p> <p>4 A. Yes.</p> <p>5 Q. And do you remember when you first</p> <p>6 spoke with anyone from Miss Littlepage's office</p> <p>7 regarding Jimmy Grant?</p> <p>8 A. Probably sometime in the same time</p> <p>9 period as the other one, probably before or</p> <p>10 after. I don't recall exactly.</p> <p>11 Q. Did you ever examine Jimmy Grant?</p> <p>12 A. No.</p> <p>13 Q. Did you ever meet Jimmy Grant?</p> <p>14 A. No.</p> <p>15 Q. Did you ever speak to Jimmy Grant?</p> <p>16 A. I may have spoken to him. I know I</p> <p>17 spoke to one or two people briefly on the phone.</p> <p>18 I don't remember if it was him or somebody else.</p> <p>19 Q. And what was the nature of the</p> <p>20 conversation?</p> <p>21 A. Probably something on the order of a</p> <p>22 review of what my findings were, what my opinions</p> <p>23 were regarding his case.</p> <p>24 Q. On paragraph 5, you've listed four</p> <p>25 groups of medical records. Are those the only</p>	<p>1 Howard Pomeranz</p> <p>2 regarding the amount of hours and the</p> <p>3 amount of money you billed for Mr. Grant's</p> <p>4 case and Mr. Hall's case.</p> <p>5 DOCUMENT/DATA REQUESTED:</p> <p>6 A. Okay.</p> <p>7 MR. BECNEL: Dr. Pomeranz, why don't</p> <p>8 you just make a note of the requests she's</p> <p>9 making so we don't forget about it.</p> <p>10 MS. LESKIN: We'll follow up.</p> <p>11 MR. PENTON: Follow up with a</p> <p>12 letter.</p> <p>13 MS. LESKIN: I appreciate it.</p> <p>14 (Pomeranz 8, Affidavit of Howard</p> <p>15 Pomeranz, M.D., Ph.D, dated February 22,</p> <p>16 2005, marked for identification.)</p> <p>17 MS. LESKIN: We've marked as</p> <p>18 Exhibit 8 an affidavit of Howard D.</p> <p>19 Pomeranz dated February 22, 2005.</p> <p>20 Q. Do you recognize this affidavit?</p> <p>21 A. I do.</p> <p>22 Q. And again, looking through, this is</p> <p>23 in relation to Charles Sansone?</p> <p>24 A. Yes.</p> <p>25 Q. And I guess I should ask you, the</p>

<p>42</p> <p>1 Howard Pomeranz</p> <p>2 second page, is that your signature?</p> <p>3 A. Yes.</p> <p>4 Q. Can you take a look at the signature</p> <p>5 on Exhibits 7 and 6 as well and confirm those are</p> <p>6 yours?</p> <p>7 A. Yes.</p> <p>8 Q. Again, I'll represent to you that</p> <p>9 Mr. Sansone is also represented by, among other</p> <p>10 people, Miss Littlepage's office. Is that</p> <p>11 consistent with your recollection?</p> <p>12 A. Yes.</p> <p>13 Q. Do you know how far -- how long</p> <p>14 before February 22, 2005, you first had contact</p> <p>15 with any of Mr. Sansone's attorneys regarding his</p> <p>16 case?</p> <p>17 A. I really don't recall exactly, but</p> <p>18 again, probably would have been several months</p> <p>19 before this was written.</p> <p>20 Q. Did you ever examine Mr. Sansone?</p> <p>21 A. No.</p> <p>22 Q. Did you ever meet with Mr. Sansone?</p> <p>23 A. No.</p> <p>24 Q. Did you ever speak to Mr. Sansone?</p> <p>25 A. I don't believe so.</p>	<p>44</p> <p>1 Howard Pomeranz</p> <p>2 reflect the amount of time and the amount</p> <p>3 of money received for Mr. Sansone's case.</p> <p>4 A. Okay.</p> <p>5 DOCUMENT/DATA REQUESTED:</p> <p>6 (Pomeranz 9, Expert Report of Howard</p> <p>7 D. Pomeranz, M.D., Ph.D, Pursuant to</p> <p>8 Federal Rule of Civil Procedure</p> <p>9 26(a)(2)(B), marked for identification.)</p> <p>10 MS. LESKIN: We've marked as</p> <p>11 Exhibit 9 a document entitled, "Expert</p> <p>12 Report of Howard D. Pomeranz Pursuant to</p> <p>13 Federal Rule of Civil Procedure</p> <p>14 26(a)(2)(B)."</p> <p>15 Q. I don't know if you recognize the</p> <p>16 first page, but do you recognize starting the</p> <p>17 second page?</p> <p>18 A. Yes.</p> <p>19 Q. And is that your signature?</p> <p>20 A. Yes.</p> <p>21 Q. And did you in fact prepare this</p> <p>22 report?</p> <p>23 A. Yes.</p> <p>24 Q. And did you write this report on</p> <p>25 your own or did someone help you?</p>
<p>43</p> <p>1 Howard Pomeranz</p> <p>2 Q. And in paragraph 5, you list four</p> <p>3 doctors whose medical records you reviewed. Were</p> <p>4 there any other medical records that you reviewed</p> <p>5 for Mr. Sansone?</p> <p>6 A. No. These would be the ones that I</p> <p>7 listed there.</p> <p>8 Q. And those were again provided to you</p> <p>9 by Mr. Sansone's attorneys?</p> <p>10 A. Correct.</p> <p>11 Q. And were you paid to review the</p> <p>12 records and prepare this affidavit?</p> <p>13 A. Yes.</p> <p>14 Q. And sitting here today, do you</p> <p>15 recall how much money you received for preparing</p> <p>16 the record -- the affidavit for Mr. Sansone?</p> <p>17 A. Again, probably a few thousand</p> <p>18 dollars for several hours of time, but I don't</p> <p>19 recall the exact figure.</p> <p>20 Q. Would you have a record of how long</p> <p>21 you spent and how much money you received either</p> <p>22 in the home or at your office?</p> <p>23 A. Hopefully I still do.</p> <p>24 MS. LESKIN: And so we would again</p> <p>25 request documents relating to -- that would</p>	<p>45</p> <p>1 Howard Pomeranz</p> <p>2 A. No, I wrote it on my own.</p> <p>3 Q. When were you first contacted about</p> <p>4 the need for this report that we've marked as</p> <p>5 Exhibit 9?</p> <p>6 A. Probably about -- maybe a month or</p> <p>7 at most two months before this was written.</p> <p>8 Q. And who contacted you?</p> <p>9 A. I believe it was Mr. Penton's</p> <p>10 office.</p> <p>11 Q. Had you spoken with anyone from</p> <p>12 Mr. Penton's office prior to that time?</p> <p>13 A. About this specifically or about</p> <p>14 anything?</p> <p>15 Q. About anything.</p> <p>16 A. Yes. His office had been in contact</p> <p>17 with me prior to writing this.</p> <p>18 Q. What was your understanding of the</p> <p>19 need for this report, why it was necessary?</p> <p>20 A. To provide an opinion for the legal</p> <p>21 case that was being put forward on behalf of the</p> <p>22 patients.</p> <p>23 Q. When were you first contacted by</p> <p>24 Mr. Penton's office?</p> <p>25 A. I believe it was about a year ago.</p>

12 (Pages 42 to 45)

<p>1 Howard Pomeranz</p> <p>2 Q. So June of 2006?</p> <p>3 A. Give or take a month or two.</p> <p>4 Q. Had you ever met Mr. Becnel?</p> <p>5 A. No.</p> <p>6 Q. Are you familiar with what a</p> <p>7 multidistrict litigation is?</p> <p>8 A. I think I am now; but a year or two</p> <p>9 ago, I had no clue as to what it was.</p> <p>10 Q. You understand there's several</p> <p>11 different lawyers on behalf of several different</p> <p>12 plaintiffs involved in the multidistrict</p> <p>13 litigation?</p> <p>14 A. I understand that now. In fact, a</p> <p>15 year or two ago, as I made contact with various</p> <p>16 attorneys for these documents that you brought</p> <p>17 forward here, I was trying to figure out where</p> <p>18 this was all going, were these going to be</p> <p>19 individual cases, were they talking to one</p> <p>20 another and so on. So I kind of felt until maybe</p> <p>21 about a year ago, I had no idea what was really</p> <p>22 going on.</p> <p>23 Q. Was that one of the reasons for your</p> <p>24 preparing this list in 2004 that we've marked as</p> <p>25 Pomeranz Exhibit 4?</p>	<p>1 Howard Pomeranz</p> <p>2 A. I think I probably did a literature</p> <p>3 search to make sure that I was up to date on</p> <p>4 things that had been published up to that point.</p> <p>5 Q. How many hours did you spend</p> <p>6 preparing this report that we've marked as</p> <p>7 Exhibit 9?</p> <p>8 A. I believe probably five, six, seven</p> <p>9 hours, something at least on that order of amount</p> <p>10 of time.</p> <p>11 Q. How much money have you received</p> <p>12 from the plaintiffs' lawyers in connection with</p> <p>13 this report?</p> <p>14 A. Well, it would have been 5- or</p> <p>15 \$6,000, something in that order. I can remember</p> <p>16 basically it was at a thousand dollars an hour,</p> <p>17 whatever that worked out to.</p> <p>18 Q. Do you have copies of bills or</p> <p>19 invoices or records that you've kept that</p> <p>20 indicate how long you've spent on this</p> <p>21 litigation?</p> <p>22 A. For this I have, because it's very</p> <p>23 recent. So I'm sure I have that.</p> <p>24 MS. LESKIN: We would request copies</p> <p>25 of any bills that indicate how many hours</p>
<p>1 Howard Pomeranz</p> <p>2 A. I don't know if it was so much that,</p> <p>3 as some of the attorneys I think had called me to</p> <p>4 ask me if I knew of other cases. And after</p> <p>5 getting a few of these, I said, Look here, you</p> <p>6 guys just -- you know, go talk to one another,</p> <p>7 whatever, and figure it out. I'll give you the</p> <p>8 names of who's contacted me and you all can get</p> <p>9 together and figure out how you're going to sort</p> <p>10 this out.</p> <p>11 Q. Other than the four specific cases</p> <p>12 we've marked affidavits for, have you prepared</p> <p>13 affidavits for any other cases involving Viagra</p> <p>14 and ischemic optic neuropathy?</p> <p>15 A. I don't think so. In fact, these</p> <p>16 that you provided me I think I've given you as</p> <p>17 well. It's what I was able to pull out of my</p> <p>18 records yesterday. I think I may have spoken on</p> <p>19 the phone about some of them, but I'm not sure if</p> <p>20 in any other cases I was asked to prepare any</p> <p>21 formal reports.</p> <p>22 Q. Okay. At the time you prepared this</p> <p>23 report we've marked as Exhibit 9, did you do any</p> <p>24 additional research other than the reading you</p> <p>25 had already done?</p>	<p>1 Howard Pomeranz</p> <p>2 and how much money you've received from</p> <p>3 whichever plaintiffs' lawyer has been</p> <p>4 paying your bills in connection with this</p> <p>5 report that we marked as Exhibit 9.</p> <p>6 DOCUMENT/DATA REQUESTED:</p> <p>7 A. Okay.</p> <p>8 MR. BECNEL: Counsel, at a break --</p> <p>9 I may have those at my office and I can</p> <p>10 have them fax them here for you.</p> <p>11 MS. LESKIN: That would be great.</p> <p>12 Thank you.</p> <p>13 BY MS. LESKIN:</p> <p>14 Q. In total, and I understand that</p> <p>15 you've been dealing with lots of different</p> <p>16 lawyers, how many hours have you spent -- let's</p> <p>17 start so far this year in 2007, on litigation</p> <p>18 relating to ischemic optic neuropathy and PDE5</p> <p>19 inhibitors?</p> <p>20 A. It's hard to say exactly. I sent a</p> <p>21 CD-ROM with some documents. I think a lot of</p> <p>22 them were Pfizer-related documents that I think I</p> <p>23 spent several days of time reading through in</p> <p>24 between other things I was doing in my office.</p> <p>25 So it's hard to put an exact number</p>

<p>1 Howard Pomeranz</p> <p>2 on it, but -- I don't know, 50, 60, 70 hours. I</p> <p>3 don't know. A lot of it is done on nights and</p> <p>4 weekends. I really don't have time to do this</p> <p>5 much during normal office hours because I'm busy</p> <p>6 with patients, so that's when I've been doing</p> <p>7 most of this.</p> <p>8 Q. Would those hours be reflected in</p> <p>9 the same documents that reflect the total hours</p> <p>10 spent on --</p> <p>11 A. No, I haven't created any bill with</p> <p>12 respect to the time spent on looking at all the</p> <p>13 recent litigation-related stuff that's been sent</p> <p>14 to me. I don't know if I will or not, but I</p> <p>15 really just spent more time -- things that I've</p> <p>16 billed has been more for either reports that I've</p> <p>17 written or things that are more concrete than</p> <p>18 that.</p> <p>19 Q. So how much money have you received</p> <p>20 so far in 2007 in connection with litigation</p> <p>21 relating to ischemic optic neuropathy and PDE5</p> <p>22 inhibitors?</p> <p>23 A. Probably something on the order of</p> <p>24 maybe \$10,000.</p> <p>25 Q. And how much money in 2006 did you</p>	<p>50</p> <p>1 Howard Pomeranz</p> <p>2 know, maybe 20-, \$30,000. Maybe that much. I'm</p> <p>3 not sure.</p> <p>4 Q. You received about 10,000 this year</p> <p>5 and 10-, 15- or 20,000 last year. You had not</p> <p>6 received any money prior to 2006?</p> <p>7 A. No, I did, but they were relatively</p> <p>8 small amounts for a few hours spent on cases here</p> <p>9 and there. So it wasn't anything that really</p> <p>10 amounted to any large amounts of time other than</p> <p>11 just case reviews.</p> <p>12 (Pomeranz 10, Article entitled, "Can</p> <p>13 Erectile Dysfunction Drug Use Lead to</p> <p>14 Ischaemic Optic Neuropathy?" by Howard</p> <p>15 Pomeranz, marked for identification.)</p> <p>16 MS. LESKIN: I've marked as</p> <p>17 Exhibit 10 an article by H.D. Pomeranz in</p> <p>18 the British Journal of Ophthalmology 2006.</p> <p>19 Q. This is your article; correct?</p> <p>20 A. Yes.</p> <p>21 Q. Take a look at the end of the</p> <p>22 article, at the list of references. Under</p> <p>23 "Competing interests," it says, "HP" -- I'm</p> <p>24 assuming that refers to you -- "has been paid as</p> <p>25 a consultant for reviewing cases of NAION</p>
<p>1 Howard Pomeranz</p> <p>2 receive in connection with litigation relating to</p> <p>3 ischemic optic neuropathy and PDE5 inhibitors?</p> <p>4 A. Probably something on the same</p> <p>5 order. Probably -- maybe 10, 15, maybe 20. I</p> <p>6 don't remember the exact amount.</p> <p>7 Q. And do you have records that reflect</p> <p>8 the amount of money you received?</p> <p>9 A. Yes.</p> <p>10 MS. LESKIN: We would ask for copies</p> <p>11 of any records that reflect the amount of</p> <p>12 money you've received both in 2007, 2006.</p> <p>13 And in fact, we would ask for monies you've</p> <p>14 received in connection with ischemic optic</p> <p>15 neuropathy litigation and PDE5 going back</p> <p>16 to 2000, if you have those records.</p> <p>17 DOCUMENT/DATA REQUESTED:</p> <p>18 A. If I have them available, I'll make</p> <p>19 them available to you.</p> <p>20 Q. Appreciate it.</p> <p>21 Since the very first case you worked</p> <p>22 on relating to Viagra or any other PDE5 inhibitor</p> <p>23 and ischemic optic neuropathy, how much would you</p> <p>24 estimate in total you've received?</p> <p>25 A. I'm not really sure, but, I don't</p>	<p>51</p> <p>1 Howard Pomeranz</p> <p>2 associated with EDD use."</p> <p>3 I assume that's erectile dysfunction</p> <p>4 drug use?</p> <p>5 A. Yes, if that's what the</p> <p>6 abbreviation -- yes, erectile dysfunction drugs</p> <p>7 in the first paragraph.</p> <p>8 Q. And the payments that you refer to</p> <p>9 here, does that refer to the litigation payments</p> <p>10 that we've been talking about?</p> <p>11 A. Yes. Or the case reviews that we've</p> <p>12 been talking about, yes.</p> <p>13 Q. Were there any other -- have you</p> <p>14 served as a consultant for any other purpose</p> <p>15 other than the case reviews and litigations we've</p> <p>16 been talking about?</p> <p>17 A. Well --</p> <p>18 Q. Relating to NAION and --</p> <p>19 A. No. I've reviewed other cases about</p> <p>20 other matters, but that's what this is referring</p> <p>21 to.</p> <p>22 MR. BECNEL: Counsel, are you</p> <p>23 limiting to the work he did for Pfizer as a</p> <p>24 guest speaker on this?</p> <p>25 MS. LESKIN: I'm referring to what</p>

14 (Pages 50 to 53)

<p>54</p> <p>1 Howard Pomeranz</p> <p>2 he has listed there.</p> <p>3 MR. BECNEL: All right.</p> <p>4 (Pomeranz 11, Article entitled,</p> <p>5 "Nonarteritic Ischemic Optic Neuropathy</p> <p>6 Developing Soon After Use of Sildenafil</p> <p>7 (Viagra): A Report of Seven New Cases," by</p> <p>8 Howard Pomeranz, et al., marked for</p> <p>9 identification.)</p> <p>10 MS. LESKIN: We've marked as Exhibit</p> <p>11 Pomeranz Exhibit 11 an article by Howard D.</p> <p>12 Pomeranz and Abdhish Bhavsar --</p> <p>13 Q. Did I pronounce that correctly?</p> <p>14 A. Yes.</p> <p>15 MS. LESKIN: -- "Nonarteritic</p> <p>16 Ischemic Optic Neuropathy Developing Soon</p> <p>17 After Use of Sildenafil (Viagra): A Report</p> <p>18 of Seven New Cases," published in the</p> <p>19 Journal of Neuro-Ophthalmology 2005.</p> <p>20 Q. This is your article; correct?</p> <p>21 A. Yes.</p> <p>22 Q. Did you make any financial</p> <p>23 disclosure in this article similar to the one</p> <p>24 we've looked at in the British Journal of</p> <p>25 Ophthalmology?</p>	<p>56</p> <p>1 Howard Pomeranz</p> <p>2 published in the Archives of Ophthalmology,</p> <p>3 May 2006, entitled, "Nonarteritic Anterior</p> <p>4 Ischemic Optic Neuropathy and Sildenafil."</p> <p>5 Q. This is your article; correct?</p> <p>6 A. I'm a coauthor.</p> <p>7 Q. And in fact, under "Author</p> <p>8 contributions," it says, "The authors had full</p> <p>9 access to all the reports reviewed for the study</p> <p>10 and take responsibility for the integrity of the</p> <p>11 data and the accuracy of the data analysis."</p> <p>12 That includes you; correct?</p> <p>13 A. Correct.</p> <p>14 Q. Under "Financial disclosure," it</p> <p>15 says, "None"; correct?</p> <p>16 A. Correct. There's no financial</p> <p>17 interest in looking through these drug</p> <p>18 directories here that are being referred to in</p> <p>19 this editorial.</p> <p>20 Q. My question was simply, under</p> <p>21 "Financial disclosures," you wrote, "None";</p> <p>22 correct?</p> <p>23 MR. BECNEL: Objection.</p> <p>24 Repetitious.</p> <p>25 JUDGE BORG: Overruled.</p>
<p>55</p> <p>1 Howard Pomeranz</p> <p>2 A. No.</p> <p>3 Q. So you didn't disclose that you were</p> <p>4 consulting for plaintiffs in litigation when you</p> <p>5 published this article in the Journal of</p> <p>6 Neuro-Ophthalmology; is that correct?</p> <p>7 A. Correct.</p> <p>8 MR. BECNEL: Nor for defendants.</p> <p>9 MS. LESKIN: Counsel, I object to</p> <p>10 your making comments not related to the</p> <p>11 litigation during a deposition.</p> <p>12 MR. BECNEL: It is related.</p> <p>13 MS. LESKIN: You will have your</p> <p>14 opportunity to ask questions.</p> <p>15 JUDGE BORG: Stop it, Mr. Becnel.</p> <p>16 You're going to get your chance. Make your</p> <p>17 notes and you can do what you want on the</p> <p>18 record when it's your turn.</p> <p>19 (Pomeranz 12, Article entitled,</p> <p>20 "Nonarteritic Anterior Ischemic Optic</p> <p>21 Neuropathy and Sildenafil," by Fraunfelder,</p> <p>22 et al., marked for identification.)</p> <p>23 MS. LESKIN: Marked as Exhibit 12 is</p> <p>24 an editorial by Frederick W. Fraunfelder,</p> <p>25 Howard D. Pomeranz, and Robert A. Egan,</p>	<p>57</p> <p>1 Howard Pomeranz</p> <p>2 A. It says, "None."</p> <p>3 JUDGE BORG: You can answer the</p> <p>4 question.</p> <p>5 (Pomeranz 13, PowerPoint</p> <p>6 presentation entitled, "Optic Neuropathy:</p> <p>7 What are your patients eating and what meds</p> <p>8 are they taking?" by Howard Pomeranz,</p> <p>9 marked for identification.)</p> <p>10 MS. LESKIN: Marked as Exhibit 13 is</p> <p>11 a PowerPoint presentation entitled, "Optic</p> <p>12 Neuropathy: What are your patients eating</p> <p>13 and what meds are they taking?" by Howard</p> <p>14 Pomeranz.</p> <p>15 Q. This is your presentation; correct?</p> <p>16 A. That's correct.</p> <p>17 Q. And you gave this at a meeting of</p> <p>18 the North American Neuro-Ophthalmology Society in</p> <p>19 November of 2006?</p> <p>20 A. No, this was given before the</p> <p>21 American Academy of Ophthalmology.</p> <p>22 Q. In November of 2006?</p> <p>23 A. If that's when the meeting was in</p> <p>24 Las Vegas last year.</p> <p>25 Q. I'll represent to you we took this</p>

<p>58</p> <p>1 Howard Pomeranz</p> <p>2 off the Internet, off the NANO's website. And it</p> <p>3 indicated it's from a meeting in November of</p> <p>4 2006.</p> <p>5 A. Yes, it was actually at a symposium</p> <p>6 where there were multiple speakers. And</p> <p>7 traditionally NANO sponsors or cosponsors one of</p> <p>8 those symposia at the academy meeting every year</p> <p>9 and I was invited to be a speaker at this</p> <p>10 symposium.</p> <p>11 Q. And this is your presentation at</p> <p>12 that meeting?</p> <p>13 A. That's right.</p> <p>14 Q. If you look at page 2, under</p> <p>15 "Financial disclosure," you wrote, "The author</p> <p>16 acknowledges no financial interest"; right?</p> <p>17 That's what you wrote?</p> <p>18 A. That's right.</p> <p>19 Q. Just to go back to your expert</p> <p>20 report for a moment, you said you wrote that.</p> <p>21 Did you provide a draft to anyone prior to</p> <p>22 finalizing it?</p> <p>23 A. I believe I did.</p> <p>24 Q. Who did you provide the draft to?</p> <p>25 A. I think Mr. Overholtz.</p>	<p>60</p> <p>1 Howard Pomeranz</p> <p>2 Q. Is that the only change you made?</p> <p>3 A. Yes.</p> <p>4 Q. You mentioned earlier that you</p> <p>5 received a CD of documents that you understood to</p> <p>6 be internal Pfizer documents; correct?</p> <p>7 A. Correct.</p> <p>8 Q. Prior to receiving that CD, were you</p> <p>9 asked to sign any confidentiality agreements?</p> <p>10 A. I don't think so. I know I got</p> <p>11 that -- I think there's a folder that I gave you</p> <p>12 that had something to do with the MDL. And I</p> <p>13 think there was something I signed in terms of</p> <p>14 like being on retainer as a consultant or</p> <p>15 something. But other than that, I don't think I</p> <p>16 signed anything else.</p> <p>17 Q. I'll show you a notebook that was</p> <p>18 provided in the box of materials. We don't</p> <p>19 necessarily need to mark it just yet.</p> <p>20 Let me ask you, is this what you're</p> <p>21 referring to?</p> <p>22 A. Yes.</p> <p>23 Q. And this is a February 16, 2006,</p> <p>24 letter from Michele Parfitt to you, together with</p> <p>25 a binder of materials; correct?</p>
<p>59</p> <p>1 Howard Pomeranz</p> <p>2 Q. When did you provide a draft to</p> <p>3 Mr. Overholtz?</p> <p>4 A. Probably a few weeks before the date</p> <p>5 on this. So it would have been in either late</p> <p>6 February or early March.</p> <p>7 Q. Did Mr. Overholtz provide you any</p> <p>8 comments on the draft you provided him?</p> <p>9 A. Not really. Otherwise, you know, he</p> <p>10 said it was an excellent report. And I don't</p> <p>11 think he -- he didn't make any recommendations</p> <p>12 that resulted in any change in anything that I</p> <p>13 wrote in it.</p> <p>14 Q. Did he ask you any questions about</p> <p>15 anything you had written in the report?</p> <p>16 A. Nothing that's in the report</p> <p>17 specifically; but in general, we discussed some</p> <p>18 of the issues related to ischemic optic</p> <p>19 neuropathy and ED drug use.</p> <p>20 Q. Do you remember what changes you</p> <p>21 made between the draft that you had provided to</p> <p>22 Mr. Overholtz and the final draft dated March 20,</p> <p>23 2007?</p> <p>24 A. Yes, I put the date on it and signed</p> <p>25 it.</p>	<p>61</p> <p>1 Howard Pomeranz</p> <p>2 A. Yes.</p> <p>3 Q. And the binder of materials includes</p> <p>4 Reference Manual on Scientific Evidence, Second</p> <p>5 Edition; U.S. District Court Memorandum and</p> <p>6 Pretrial Order No. 1332 from the diet drug</p> <p>7 Fen-Phen litigation; the U.S. District Court</p> <p>8 Memorandum and Pretrial Order No. 1685 also from</p> <p>9 the Fen-Phen litigation; U.S. District Court In</p> <p>10 Re: diet drug Fen-Phen Memorandum and Pretrial</p> <p>11 Order No. 1203; five, some Daubert orders, the</p> <p>12 first one of which is from the PPA litigation,</p> <p>13 that's the only one I see; and Number 6,</p> <p>14 Rule 26(b) regarding expert testimony.</p> <p>15 Is that all the materials that you</p> <p>16 were just referring to that you received?</p> <p>17 A. Yes.</p> <p>18 Q. And this retainer agreement that</p> <p>19 Miss Parfitt sent you that's attached to this</p> <p>20 binder, is that the retainer agreement that</p> <p>21 you're referring to?</p> <p>22 A. Yes.</p> <p>23 Q. Were you asked to sign anything else</p> <p>24 prior to receiving a CD of materials of Pfizer</p> <p>25 documents?</p>

16 (Pages 58 to 61)

<p>62</p> <p>1 Howard Pomeranz</p> <p>2 A. Not that I recall.</p> <p>3 Q. Were you aware there's a protective</p> <p>4 order in this litigation?</p> <p>5 A. I don't know one way or the other.</p> <p>6 Q. Were you ever told that there's a</p> <p>7 protective order in this litigation concerning</p> <p>8 confidential documents that have been produced in</p> <p>9 this litigation?</p> <p>10 A. Other than seeing what's written on</p> <p>11 the document, that there's a sticker on them or a</p> <p>12 stamp or something on them, but no conversation</p> <p>13 about it otherwise.</p> <p>14 Q. Did anyone ever explain to you the</p> <p>15 limitations on the ability to use or review those</p> <p>16 documents that have been provided to you?</p> <p>17 A. No.</p> <p>18 Q. Have you shared those documents with</p> <p>19 anyone else?</p> <p>20 A. No.</p> <p>21 (Pomeranz 14, February 2, 2006,</p> <p>22 letter from Michele Parfitt and the expert</p> <p>23 retainer agreement, marked for</p> <p>24 identification.)</p> <p>25</p>	<p>64</p> <p>1 Howard Pomeranz</p> <p>2 A. I received them, but I haven't had a</p> <p>3 chance to really review them.</p> <p>4 Q. When did you receive them?</p> <p>5 A. Approximately a week ago.</p> <p>6 Q. And has anyone indicated to you that</p> <p>7 any portions of those transcripts are</p> <p>8 confidential?</p> <p>9 A. I assume that they're confidential.</p> <p>10 I'm not about to share it with anybody else,</p> <p>11 but -- as with any other document that's part of</p> <p>12 this case, I don't have any plans to share it</p> <p>13 with anybody else.</p> <p>14 Q. Has anyone told you, has any of the</p> <p>15 plaintiffs' lawyers told you that those documents</p> <p>16 are subject to a protective order in this</p> <p>17 litigation?</p> <p>18 A. I don't recall if they did or</p> <p>19 didn't.</p> <p>20 Q. Did anyone provide you with any</p> <p>21 information regarding which specific portions of</p> <p>22 those transcripts are confidential pursuant to a</p> <p>23 protective order that's in place in this</p> <p>24 litigation?</p> <p>25 A. No.</p>
<p>63</p> <p>1 Howard Pomeranz</p> <p>2 MS. LESKIN: We're going to mark as</p> <p>3 Exhibit 14, and we'll get copies made</p> <p>4 later, of the February 2, 2006, letter from</p> <p>5 Michele Parfitt and the expert retainer</p> <p>6 that you signed and she signed.</p> <p>7 Q. And again, that is the retainer</p> <p>8 agreement that you were referring to earlier;</p> <p>9 correct?</p> <p>10 A. Yes.</p> <p>11 MS. LESKIN: Counsel, I want to put</p> <p>12 on the record our objection to the apparent</p> <p>13 violation of the court's protective order.</p> <p>14 MR. BECNEL: File your motion.</p> <p>15 Q. Other than the CD of documents that</p> <p>16 you were provided of Pfizer internal documents,</p> <p>17 were there any other documents or articles that</p> <p>18 you were provided from any of the plaintiff</p> <p>19 lawyers you've dealt with, and medical records,</p> <p>20 obviously?</p> <p>21 A. Just Mr. Thompson's records, which I</p> <p>22 was given recently. And I believe that's all.</p> <p>23 Q. Did you review any deposition</p> <p>24 transcripts from any of Pfizer's witnesses in</p> <p>25 this litigation?</p>	<p>65</p> <p>1 Howard Pomeranz</p> <p>2 Q. Have you reviewed any portion of the</p> <p>3 new drug application for Viagra filed by Pfizer</p> <p>4 in this litigation -- filed by Pfizer?</p> <p>5 A. Can you repeat that.</p> <p>6 Q. Let me repeat that. I messed myself</p> <p>7 up.</p> <p>8 Have you reviewed any portion of the</p> <p>9 new drug application for Viagra that Pfizer filed</p> <p>10 with the FDA?</p> <p>11 A. "New" meaning like ten years ago</p> <p>12 when the drug was first being developed or</p> <p>13 something recent?</p> <p>14 Q. Do you have an understanding of what</p> <p>15 a new drug application is?</p> <p>16 A. You mean when the drug was first</p> <p>17 being developed to put on the market ten years</p> <p>18 ago?</p> <p>19 Q. When the -- let's back up.</p> <p>20 When the FDA -- when Pfizer</p> <p>21 submitted its information to the FDA for approval</p> <p>22 of Viagra.</p> <p>23 A. Back in 19- --</p> <p>24 Q. In 1997.</p> <p>25 A. -- in the '90s, yes.</p>

<p>1 Howard Pomeranz</p> <p>2 Q. You understand that there's an</p> <p>3 application that Pfizer files with the FDA,</p> <p>4 including its clinical trial data, animals data,</p> <p>5 and other information to support the approval --</p> <p>6 to support the approval of the drug? You're</p> <p>7 familiar with that process?</p> <p>8 A. Yes.</p> <p>9 Q. Have you reviewed any other</p> <p>10 information that Pfizer provided to the FDA as</p> <p>11 part of that approval process?</p> <p>12 A. Yes. I recall when I first started</p> <p>13 writing up the case, some of the case series and</p> <p>14 thinking about, you know, how all this works, I</p> <p>15 think I went to the computer, to the website, to</p> <p>16 try to find what I could about some studies that</p> <p>17 Pfizer had done initially, whatever was available</p> <p>18 in the public record that I could access, and I</p> <p>19 think I have copies of those things in the --</p> <p>20 articles and pages in some of the folders I</p> <p>21 provided to you, just to look and see if there</p> <p>22 was any reporting of visual adverse events in any</p> <p>23 of that data that was accessible to me.</p> <p>24 Q. But did you look at any part of the</p> <p>25 application that Pfizer submitted to the FDA as</p>	<p>66</p> <p>1 Howard Pomeranz</p> <p>2 application has ever been made available on the</p> <p>3 Internet, then you had not looked at any part of</p> <p>4 the application?</p> <p>5 A. Correct.</p> <p>6 Q. And plaintiffs did not provide you</p> <p>7 any portion of the new drug application as part</p> <p>8 of this litigation?</p> <p>9 A. As far as I recall, no.</p> <p>10 Q. Have you looked at any of the study</p> <p>11 reports of any of the studies conducted by Pfizer</p> <p>12 on Viagra?</p> <p>13 A. Well, if any of those are available</p> <p>14 by public access, then I may have looked at</p> <p>15 those.</p> <p>16 Q. Sitting here today, do you</p> <p>17 specifically recall looking at any study reports?</p> <p>18 A. I know I did. I have copies of some</p> <p>19 of what I looked at in the records I provided to</p> <p>20 you. I don't remember exactly what studies they</p> <p>21 were at this point.</p> <p>22 Q. Have you looked at any</p> <p>23 correspondence between Pfizer and the FDA</p> <p>24 concerning ischemic optic neuropathy?</p> <p>25 A. Only in what was provided on that</p>
<p>1 Howard Pomeranz</p> <p>2 part of the approval process?</p> <p>3 A. Well, I don't know if what I looked</p> <p>4 at was part of the application or part of other</p> <p>5 clinical trials that were going on. I don't know</p> <p>6 how much of what was actually part of the</p> <p>7 application -- if that's confidential material,</p> <p>8 then obviously I didn't have access to it.</p> <p>9 If there was some part of what was</p> <p>10 part of that that was accessible via publicly</p> <p>11 accessible information, I might have looked at</p> <p>12 some of that as part of my initial research on</p> <p>13 this.</p> <p>14 Q. So what you looked at was</p> <p>15 information you saw on the Internet and you're</p> <p>16 not sure what the source of that information was;</p> <p>17 is that correct?</p> <p>18 A. Well, I know it was Pfizer</p> <p>19 documents, but I guess it's whatever was</p> <p>20 available, you know, to the public as opposed to</p> <p>21 any kind of privileged information. So I don't</p> <p>22 know if it was part of a drug application, if it</p> <p>23 was clinical trials they were doing. Whatever</p> <p>24 was accessible publicly.</p> <p>25 Q. So if no information from the actual</p>	<p>67</p> <p>1 Howard Pomeranz</p> <p>2 CD-ROM of documents from -- that Pfizer provided</p> <p>3 as part of the deposition.</p> <p>4 Q. Did you ask plaintiffs' counsel for</p> <p>5 those documents or did they just send them to</p> <p>6 you?</p> <p>7 A. No, they sent them to me.</p> <p>8 Q. Have you given them any opinions</p> <p>9 relating to your review of those documents?</p> <p>10 A. No.</p> <p>11 Q. Did you meet with any of plaintiffs'</p> <p>12 counsel prior to today's deposition?</p> <p>13 A. We met for breakfast this morning</p> <p>14 for half an hour.</p> <p>15 Q. Did you discuss the deposition at</p> <p>16 all?</p> <p>17 A. A little bit, yes.</p> <p>18 Q. Did you discuss Dr. Hayreh's</p> <p>19 deposition?</p> <p>20 A. Briefly.</p> <p>21 Q. What were you told about</p> <p>22 Dr. Hayreh's deposition?</p> <p>23 A. Oh, I guess some of the mechanics of</p> <p>24 how it went and it went to a second day and</p> <p>25 things about how there were certain things he</p>

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<p>1 Howard Pomeranz</p> <p>2 wanted to say that he may or may not have been</p> <p>3 able to actually say during the deposition,</p> <p>4 things of that sort.</p> <p>5 Q. And did you receive any information</p> <p>6 regarding Dr. Lubin's deposition?</p> <p>7 A. No. I think I've just received</p> <p>8 their expert reports, but I think the only actual</p> <p>9 deposition that I've read or that I've received a</p> <p>10 transcript for is Dr. Hayreh's.</p> <p>11 Q. Did you read that transcript?</p> <p>12 A. Most of it. Not every page, but got</p> <p>13 the gist of it.</p> <p>14 Q. Have you ever met Dr. Hayreh?</p> <p>15 A. No. I know who he is. I've heard</p> <p>16 him lecture. But I haven't actually spoken to</p> <p>17 him directly.</p> <p>18 Q. Do you know Dr. Gerald McGuinn?</p> <p>19 A. I know who he is. I haven't -- I</p> <p>20 don't know him personally.</p> <p>21 Q. You've never spoken to him?</p> <p>22 A. No.</p> <p>23 Q. Do you know Dr. Aruna?</p> <p>24 A. No.</p> <p>25 Q. Have you ever -- do you know who he</p>	<p>70</p> <p>1 Howard Pomeranz</p> <p>2 A. I haven't had an opportunity to yet.</p> <p>3 Q. Have those been provided to you?</p> <p>4 A. About a week ago now.</p> <p>5 Q. I'm aware that you participated in a</p> <p>6 meeting with Pfizer in 2001 regarding your report</p> <p>7 on ischemic optic neuropathy; correct?</p> <p>8 A. That sounds right.</p> <p>9 Q. Prior to that meeting, had you ever</p> <p>10 spoken with anyone from Pfizer regarding Viagra?</p> <p>11 A. No.</p> <p>12 Q. Are you a member of ARVO?</p> <p>13 A. Yes.</p> <p>14 Q. And do you attend their annual</p> <p>15 meeting in Fort Lauderdale?</p> <p>16 A. Not every year, but as often as I</p> <p>17 can.</p> <p>18 Q. Did you attend that meeting in 1998?</p> <p>19 A. I really don't recall specifically.</p> <p>20 I might have.</p> <p>21 Q. Did you attend Pfizer's presentation</p> <p>22 in 1998 in Fort Lauderdale regarding Viagra?</p> <p>23 A. Not that I recall.</p> <p>24 Q. Were you aware that Pfizer met with</p> <p>25 neuro-ophthalmologists at the ARVO meeting in</p>
<p>71</p> <p>1 Howard Pomeranz</p> <p>2 is?</p> <p>3 A. Well, just by the CV or credentials</p> <p>4 attached to the expert opinion, but otherwise,</p> <p>5 no.</p> <p>6 Q. So prior to this litigation, you</p> <p>7 didn't know who Dr. Aruna was?</p> <p>8 A. Correct.</p> <p>9 Q. Prior to the litigation, did you</p> <p>10 know who Dr. McGuinn was?</p> <p>11 A. Yes, through the paper that he had</p> <p>12 written. But other than that, I don't know him</p> <p>13 personally.</p> <p>14 Q. Do you know Dr. Alon Harris?</p> <p>15 A. I know who he is. I never met him</p> <p>16 personally.</p> <p>17 Q. Do you know Dr. John Gamel?</p> <p>18 A. No.</p> <p>19 Q. Do you know Dr. Steven Kimmel?</p> <p>20 A. No.</p> <p>21 Q. Do you know Dr. Ron Gotts?</p> <p>22 A. No.</p> <p>23 Q. Have you reviewed the expert reports</p> <p>24 submitted by any of Pfizer's experts in this</p> <p>25 litigation?</p>	<p>72</p> <p>1 Howard Pomeranz</p> <p>2 1998 to discuss the data on Viagra, the ocular</p> <p>3 data on Viagra?</p> <p>4 A. In 1998, no. I'm not aware of that.</p> <p>5 Q. When you attended the meeting in</p> <p>6 2001 to give your presentation, who contacted you</p> <p>7 to attend that meeting?</p> <p>8 A. I mean, at this point, I don't</p> <p>9 remember exactly. I know it was someone from</p> <p>10 Pfizer. I don't remember exactly who called me</p> <p>11 to ask if I wished to participate.</p> <p>12 Q. And what were you told about the</p> <p>13 meeting at the time you were invited?</p> <p>14 A. Well, I know it was called something</p> <p>15 like Viagra Ophthalmology Advisory Committee or</p> <p>16 Board, and people were invited to talk about</p> <p>17 things related to vision with the use of the</p> <p>18 drug.</p> <p>19 Q. Did you receive any money for</p> <p>20 attending that meeting?</p> <p>21 A. I believe I did. I'm sure they paid</p> <p>22 for my expenses, hotel, airfare, that sort of</p> <p>23 thing. And there may have been an honorarium</p> <p>24 involved in attending as well.</p> <p>25 Q. Do you remember how much you</p>

<p>1 Howard Pomeranz 2 received? 3 A. Off the top of my head, no. But it 4 was probably something modest. Maybe a thousand 5 dollars or something in that order. I don't 6 remember exactly. 7 Q. Now, when you were invited, what 8 were you told about the purpose of the meeting? 9 A. Really at this point in time, I 10 don't recall. I just remember being invited 11 because it was an opportunity to discuss my work 12 and that other people would be discussing other 13 things that are vision-related or otherwise in 14 association with the drug. 15 Q. How many people were in attendance 16 at that meeting? 17 A. My recollection, probably in the 18 order of maybe 20, something like that. 19 Q. Did you know any of the other people 20 that attended the meeting? 21 A. I don't think I knew anyone 22 personally. I think the only people I knew sort 23 of by reputation as ophthalmologists was Dr. -- 24 is it Marmer or Marmon from California? I'm not 25 sure I recall anyone else specifically who I</p>	<p>74 1 Howard Pomeranz 2 DOCUMENT/DATA REQUESTED: 3 A. Okay. It was a review of basically 4 the five cases that were published in the first 5 case series. 6 Q. Was there any discussion following 7 your presentation? 8 A. There probably was, but I don't 9 recall the substance of it. 10 Q. You don't recall anything of the 11 substance? 12 A. No, I don't remember if there was 13 any -- really any substantial discussion about 14 them. I think people said things like, you know, 15 Nice presentation, whatever, were polite and all. 16 But I'm not sure there was any pro/con, big 17 discussion afterwards. 18 I'm not sure that the way in which 19 all those -- all of the presentations were given 20 were in that kind of format to allow for 21 extensive discussion afterwards. 22 As I recall, most people gave their 23 presentations, and I'm not sure if there was much 24 discussion after each one of them. I think 25 individually there may have been some people who</p>
<p>75 1 Howard Pomeranz 2 really knew anything about before that. 3 Q. Was Al Laties at that meeting? 4 A. Actually, he may have been, but I 5 don't think -- I never knew Dr. Laties before 6 that. I may have met him for the first time 7 there. I think -- I don't even know if I really 8 talked with him since then. I think -- I didn't 9 certainly didn't know him at all before going to 10 that meeting. 11 Q. Did you stand up and give a 12 presentation or did you just talk briefly about 13 your case series? 14 A. I believe it was either a slide or a 15 PowerPoint presentation. 16 Q. Is that a PowerPoint presentation 17 that you prepared? 18 A. Yes. 19 Q. Would you still have a copy of that 20 PowerPoint presentation? 21 A. I don't know. Maybe. I'm not sure. 22 It's from, what, seven years ago. I might. I'm 23 not sure. 24 MS. LESKIN: If you have a copy, 25 we'd ask for a copy of the presentation.</p>	<p>77 1 Howard Pomeranz 2 came up to maybe discuss my presentation with me 3 individually. But I don't recall. I may be 4 wrong that there was any public forum of 5 discussion about the presentation after I gave 6 it. 7 Q. Who do you recall coming up to you 8 to discuss your presentation? 9 A. If it was anybody, it would have 10 been either Dr. Marmer or Dr. Laties. I really 11 don't recall anyone else specifically who I 12 discussed anyone with there. 13 Q. And what do you recall the 14 discussion with either Dr. Marmer or Dr. Laties? 15 A. I really don't. It's too long ago. 16 I think -- I don't recall really the exact 17 substance of the conversation. 18 Q. Following your presentation, did you 19 have any other conversations with anyone from 20 Pfizer regarding Viagra? 21 A. No conversations. I remember at one 22 point getting a letter asking me to I think fill 23 out a formal report about some of the cases or 24 asking if the cases that were in the case reports 25 were cases that had been formally reported, or</p>

<p>78</p> <p>1 Howard Pomeranz</p> <p>2 something to that extent; but other than that,</p> <p>3 nothing else.</p> <p>4 Q. Did you have any e-mail</p> <p>5 correspondence with anyone from Pfizer following</p> <p>6 that meeting?</p> <p>7 A. Not that I recall.</p> <p>8 Q. Did you have any further</p> <p>9 conversations with Dr. Marmer regarding Viagra</p> <p>10 following that meeting?</p> <p>11 A. Not that I recall.</p> <p>12 Q. Did you have any conversations with</p> <p>13 Dr. Laties regarding Viagra following that</p> <p>14 meeting?</p> <p>15 A. I might have. I know -- maybe a</p> <p>16 year or two years later, I remember I gave a</p> <p>17 presentation at the American Academy of</p> <p>18 Ophthalmology in Dallas to present the cases, I</p> <p>19 think, or something similar to probably what I</p> <p>20 presented at Pfizer. It's in my CV.</p> <p>21 I'm sure -- exactly when that was, I</p> <p>22 don't recall the exact year, but I'm sure there</p> <p>23 were people that came up to my poster that I had</p> <p>24 there and talked about the findings. And I don't</p> <p>25 know if Dr. Marmer or Dr. Laties may have been</p>	<p>80</p> <p>1 Howard Pomeranz</p> <p>2 of Tape 1.</p> <p>3 (Recess from the record.)</p> <p>4 THE VIDEOGRAPHER: Back on the</p> <p>5 record. The time is 10:14. This is the</p> <p>6 beginning of Tape 2.</p> <p>7 BY MS. LESKIN:</p> <p>8 Q. We're going to switch gears a little</p> <p>9 bit and talk about the main reason we're here,</p> <p>10 which is nonarteritic ischemic optic neuropathy,</p> <p>11 and I refer to that as NAION.</p> <p>12 Is that a term you're comfortable</p> <p>13 with?</p> <p>14 A. Sure.</p> <p>15 Q. Shortened as N-A-I-O-N?</p> <p>16 A. Yes.</p> <p>17 Q. If I say "NAION," you'll understand</p> <p>18 what I'm referring to?</p> <p>19 A. Correct.</p> <p>20 Q. You don't have any visceral reaction</p> <p>21 objecting to that term?</p> <p>22 A. No. I know Dr. Hayreh . . .</p> <p>23 Q. The term itself refers to</p> <p>24 nonarteritic, right, which is to distinguish it</p> <p>25 between arteritic; right?</p>
<p>79</p> <p>1 Howard Pomeranz</p> <p>2 among those people that might have come up and</p> <p>3 talked to me about it. But I know there were</p> <p>4 several people that I talked to about the cases</p> <p>5 at that time.</p> <p>6 Q. Have you spoken with anyone from</p> <p>7 Lilly or ICOS?</p> <p>8 A. No.</p> <p>9 Q. Have you spoken with anyone from</p> <p>10 Bayer?</p> <p>11 A. No.</p> <p>12 Q. Anyone from Schering?</p> <p>13 A. No.</p> <p>14 Q. Anyone from GlaxoSmithKline?</p> <p>15 A. No.</p> <p>16 Q. Prior to finalizing your expert</p> <p>17 report in this litigation, did you review it with</p> <p>18 any of your scientific colleagues?</p> <p>19 A. No.</p> <p>20 THE VIDEOGRAPHER: One minute,</p> <p>21 Counsel.</p> <p>22 MS. LESKIN: We have to change</p> <p>23 tapes. This is a good time for a break.</p> <p>24 THE VIDEOGRAPHER: We're off the</p> <p>25 record. The time is 9:55. This is the end</p>	<p>81</p> <p>1 Howard Pomeranz</p> <p>2 A. Correct.</p> <p>3 Q. And arteritic is a systemic</p> <p>4 condition; right?</p> <p>5 A. Correct.</p> <p>6 Q. By "optic neuropathy," we mean</p> <p>7 damage to the optic nerve; right?</p> <p>8 A. Correct.</p> <p>9 Q. Anterior is the anterior part of the</p> <p>10 optic nerve; right?</p> <p>11 A. Correct.</p> <p>12 Q. And that's the front of it?</p> <p>13 A. Correct.</p> <p>14 Q. When you look in the eye, you call</p> <p>15 that the optic disc?</p> <p>16 A. Yes.</p> <p>17 Q. That's the front part you see;</p> <p>18 right?</p> <p>19 A. Right.</p> <p>20 Q. The term itself includes "ischemic,"</p> <p>21 and that's because NAION is presumed to be due to</p> <p>22 a decrease in blood flow; right?</p> <p>23 A. Correct.</p> <p>24 Q. And do you have an opinion whether</p> <p>25 or not that is due to a thrombotic event, the</p>

<p style="text-align: right;">82</p> <p>1 Howard Pomeranz</p> <p>2 ischemia?</p> <p>3 A. I don't think enough is known about</p> <p>4 that to know for sure. It's possible in certain</p> <p>5 circumstances.</p> <p>6 Q. Is it due to a hemorrhagic event?</p> <p>7 A. Generally, no.</p> <p>8 Q. Is it due to an embolic event?</p> <p>9 A. No, I think it's been well</p> <p>10 established that that's not the case.</p> <p>11 Q. As a clinician, how do you diagnose</p> <p>12 a patient with NAION?</p> <p>13 A. Well, a lot of it is based on both</p> <p>14 the history of the details surrounding the loss</p> <p>15 of vision that the patient expresses to his</p> <p>16 physician and, secondarily, the objective</p> <p>17 findings on exam.</p> <p>18 Typically, the history is usually an</p> <p>19 abrupt, but sometimes slowly decremental loss of</p> <p>20 vision over time, but most commonly a sudden loss</p> <p>21 of vision. Usually not associated with pain,</p> <p>22 though sometimes it can be. Sometimes preceded</p> <p>23 by other types of visual disturbances that the</p> <p>24 patient may or may not recall prior to the sudden</p> <p>25 loss of vision.</p>	<p style="text-align: right;">84</p> <p>1 Howard Pomeranz</p> <p>2 Q. And you said that usually it's</p> <p>3 painless, but sometimes there can be some pain</p> <p>4 associated --</p> <p>5 A. Yes.</p> <p>6 Q. -- right?</p> <p>7 Again, that's a range in between</p> <p>8 there as well, between severe pain and mild pain</p> <p>9 and no pain?</p> <p>10 A. Generally it's mild pain, if there</p> <p>11 is any at all.</p> <p>12 Q. You said sometimes it's preceded by</p> <p>13 other visual disturbances and sometimes it's not?</p> <p>14 A. Correct.</p> <p>15 Q. What type of visual disturbances are</p> <p>16 you referring to there?</p> <p>17 A. Well, it really can vary with</p> <p>18 patients. Some patients may describe seeing</p> <p>19 flashes of light, changes in color, transient</p> <p>20 darkness in their vision that might last for a</p> <p>21 very brief period of time and go away, things of</p> <p>22 that sort.</p> <p>23 Q. Have you seen cases, for example,</p> <p>24 like crescent-shaped lights in the visual field</p> <p>25 or something like that?</p>
<p style="text-align: right;">83</p> <p>1 Howard Pomeranz</p> <p>2 And then the typical findings on</p> <p>3 exam would depend on the degree to which the</p> <p>4 optic nerve is damaged and could include a change</p> <p>5 in eye chart vision or visual acuity, the</p> <p>6 presence of pupil abnormality called an efferent</p> <p>7 pupillary defect.</p> <p>8 Other findings on exam might include</p> <p>9 a decrease in color vision, changes in peripheral</p> <p>10 vision, or what we call visual field. Then a</p> <p>11 change in the appearance of the optic nerve as</p> <p>12 you look in the back of the eye, if it's indeed</p> <p>13 of the anterior type rather than the posterior</p> <p>14 type.</p> <p>15 Q. Let's go through those one at a</p> <p>16 time.</p> <p>17 You said sometimes -- usually it's</p> <p>18 sudden, but it can be progressive; right?</p> <p>19 A. In some patients, it may vary. Not</p> <p>20 every patient has a textbook presentation.</p> <p>21 Q. So there's variation from one</p> <p>22 patient to -- and so not really a typical or</p> <p>23 exclusive presentation in that sense; right?</p> <p>24 A. Correct. That's true of any kind of</p> <p>25 optic neuropathy in general.</p>	<p style="text-align: right;">85</p> <p>1 Howard Pomeranz</p> <p>2 A. That might be possible. Obviously</p> <p>3 the -- one has to think about migraine and things</p> <p>4 like that that it can present that way too.</p> <p>5 That's all part of the history taking and looking</p> <p>6 at objective findings on exam.</p> <p>7 Q. But there's a wide variety in how it</p> <p>8 presents in that regard?</p> <p>9 A. There can be.</p> <p>10 Q. You said that, on exam, there's</p> <p>11 varying degrees of damage that could be evident?</p> <p>12 A. Yes.</p> <p>13 Q. And some people have worse visual</p> <p>14 acuity than others?</p> <p>15 A. Correct.</p> <p>16 Q. And some people have worse visual</p> <p>17 fields than others?</p> <p>18 A. Correct.</p> <p>19 Q. Is there any consistency as to the</p> <p>20 location of the visual field defect?</p> <p>21 A. Well, the most common type is a type</p> <p>22 that we call an altitudinal defect because it</p> <p>23 respects the -- a line going across the center of</p> <p>24 the vision and often will either be below or</p> <p>25 above that. That's the most common type of</p>

<p>1 Howard Pomeranz</p> <p>2 visual field deficit a patient will have, but</p> <p>3 they can have other types as well.</p> <p>4 Q. When you say it could be above the</p> <p>5 line or below the line, either one is a possible</p> <p>6 with NAION; right?</p> <p>7 A. Correct.</p> <p>8 Q. As well as nasal or inferior or --</p> <p>9 What's it called?</p> <p>10 A. Or temporal.</p> <p>11 Q. -- or temporal. Okay.</p> <p>12 Sometimes it can be a change in</p> <p>13 color vision, I think you mentioned; right?</p> <p>14 A. Yes.</p> <p>15 Q. But not always?</p> <p>16 A. Correct.</p> <p>17 Q. The optic -- you said there's a</p> <p>18 change to the optic nerve, the disc that you're</p> <p>19 looking at?</p> <p>20 A. In the anterior type.</p> <p>21 Q. Yes.</p> <p>22 A. Yes.</p> <p>23 Q. So in anterior ischemic optic</p> <p>24 neuropathy, what does the optic disc look like?</p> <p>25 A. Well, it would be swollen. And it</p>	<p>86</p> <p>1 Howard Pomeranz</p> <p>2 present with disc swelling before they actually</p> <p>3 lose vision. So they may not necessarily have a</p> <p>4 visual field defect at that time.</p> <p>5 But I think the presence of the</p> <p>6 visual field defect is generally a sense that</p> <p>7 whatever damage has occurred is irreversible at</p> <p>8 that point, that there's some permanence to the</p> <p>9 damage that's occurred at that point in time.</p> <p>10 Q. You said that there are patients who</p> <p>11 present with a swollen disc. What kind of</p> <p>12 symptoms would those patients have if they</p> <p>13 don't -- let me rephrase the question because it</p> <p>14 was kind of incomplete.</p> <p>15 You said there are some patients who</p> <p>16 present with a swollen disc, but no visual</p> <p>17 symptoms. What would bring that patient to see</p> <p>18 you in that case?</p> <p>19 A. Well, in a situation like that, it</p> <p>20 may be just picked up on a routine exam. And I'm</p> <p>21 not sure a diagnosis of ischemic optic neuropathy</p> <p>22 would be made at that point. Sometimes the nerve</p> <p>23 is just swollen, and we say the disc is swollen</p> <p>24 without necessarily making the diagnosis.</p> <p>25 Typically the patients that come in are the ones</p>
<p>87</p> <p>1 Howard Pomeranz</p> <p>2 may be swollen all the way around for 360 degrees</p> <p>3 around the optic disc. Sometimes it's just</p> <p>4 swollen in part, meaning part of the nerve is</p> <p>5 affected and another part of it seems not to be.</p> <p>6 There are usually hemorrhages</p> <p>7 associated with that. Sometimes there can be</p> <p>8 narrowing of the blood vessels on the surface or</p> <p>9 near the surface of the disc, particularly the</p> <p>10 arteries. And often, but not always, the patient</p> <p>11 may have the so-called disc at risk, the small</p> <p>12 optic nerve or small cup-to-disc ratio, though it</p> <p>13 isn't absolutely required.</p> <p>14 Q. And the disc at risk is referring to</p> <p>15 the size of the disc head compared to the size of</p> <p>16 the opening or the vessels? Or what is that</p> <p>17 referring to?</p> <p>18 A. Well, it can refer to the diameter</p> <p>19 of the disc as a whole, as well as to the size of</p> <p>20 the indentation on the surface of the nerve.</p> <p>21 Q. The visual defect that you see in</p> <p>22 NAION, the visual field defects, is that a direct</p> <p>23 result of the swollen disc or is it related to</p> <p>24 some other -- something else that's going on?</p> <p>25 A. Well, there are some patients who</p>	<p>88</p> <p>1 Howard Pomeranz</p> <p>2 who have noticed some loss or change in vision.</p> <p>3 Q. Is there a way to tell on</p> <p>4 examination of those patients whether or not they</p> <p>5 had had a swollen disc before they noticed a</p> <p>6 visual field defect?</p> <p>7 A. You mean if they don't have disc</p> <p>8 swelling anymore when I see them?</p> <p>9 Q. Or if you see them and they have</p> <p>10 this swelling, can you tell how long the disc</p> <p>11 swelling has been occurring relative to how long</p> <p>12 they had a visual field defect?</p> <p>13 A. Disc swelling typically lasts for</p> <p>14 maybe four to six weeks, sometimes eight weeks,</p> <p>15 that's the general time period, before it tends</p> <p>16 to resolve, unless there's something unusual</p> <p>17 about the case. So that's in a patient who's</p> <p>18 symptomatic.</p> <p>19 And a patient who's asymptomatic,</p> <p>20 who walks in and has a swollen disc, it may be</p> <p>21 difficult to tell how long it's been that way</p> <p>22 before the patient happened to come in.</p> <p>23 Q. I'm not sure that quite answered</p> <p>24 what I was saying.</p> <p>25 When a patient comes in and presents</p>

<p>90</p> <p>1 Howard Pomeranz</p> <p>2 with a swollen disc and visual field defect, is</p> <p>3 it possible for you to tell how long they've had</p> <p>4 the swollen disc at that point in time?</p> <p>5 A. Really only in conjunction with</p> <p>6 their history of how long they've said they've</p> <p>7 noticed the vision loss. Most of the time, I</p> <p>8 think patients will not have a swollen disc prior</p> <p>9 to that appointment.</p> <p>10 I've seen patients who had a normal</p> <p>11 exam and then showed up a few days later, a week</p> <p>12 later with onset of vision loss and they didn't</p> <p>13 have the swollen optic nerve before. So I think</p> <p>14 in most cases, it generally will precede very</p> <p>15 quickly, within days usually, the patient's onset</p> <p>16 into the office to be checked, but that will be</p> <p>17 the usual situation.</p> <p>18 Q. Are you aware of any studies that</p> <p>19 look at the number of patients who have swelling</p> <p>20 of the optic disc prior to any visual field</p> <p>21 defect?</p> <p>22 A. I know Dr. Hayreh has published some</p> <p>23 study like that. I don't remember the specifics</p> <p>24 of it, but I think he has mentioned in his study</p> <p>25 that that can certainly happen.</p>	<p>92</p> <p>1 Howard Pomeranz</p> <p>2 every day, but there have been some studies that</p> <p>3 suggest how common it is.</p> <p>4 Q. If you can pull out Exhibit 10,</p> <p>5 which is your editorial in the British Journal of</p> <p>6 Ophthalmology.</p> <p>7 Looking at the second paragraph of</p> <p>8 your editorial, you wrote, "NAION is a frequent</p> <p>9 cause of untreatable, sudden, irreversible vision</p> <p>10 loss in individuals older than 40 years"; right?</p> <p>11 That's what you wrote?</p> <p>12 A. That's what I wrote.</p> <p>13 Q. In fact, it's one of the most common</p> <p>14 optic nerve disorders in the elderly; right?</p> <p>15 A. Yes.</p> <p>16 Q. In your expert report that we marked</p> <p>17 earlier, you make reference to the prevalence of</p> <p>18 being one in 50,000.</p> <p>19 Do you recall that statement in your</p> <p>20 report?</p> <p>21 A. Yes.</p> <p>22 Q. Now, that really is referring to the</p> <p>23 incidents of NAION; correct?</p> <p>24 A. That was extracted from the two, I</p> <p>25 think, papers that had been published on the</p>
<p>91</p> <p>1 Howard Pomeranz</p> <p>2 Q. That wouldn't be unusual?</p> <p>3 A. Well, I guess I would say it could</p> <p>4 happen. I don't think it happens very</p> <p>5 frequently, but it could happen.</p> <p>6 Q. Do you have a way to measure how</p> <p>7 frequently it happens?</p> <p>8 A. No. I think you'd have to do</p> <p>9 probably an epidemiological study of some sort.</p> <p>10 Q. Are you aware of anyone who's</p> <p>11 attempted that sort of epidemiological study to</p> <p>12 follow a group of patients and determine how many</p> <p>13 of them get ischemic optic neuropathy, how many</p> <p>14 of them present with a disc -- optic disc edema,</p> <p>15 followed by how many of them have visual field</p> <p>16 defect and how long in between those two events?</p> <p>17 A. Probably Dr. Hayreh. As far as I'm</p> <p>18 aware, I think he's done the most work in this</p> <p>19 area.</p> <p>20 Q. You'll agree with me that NAION is a</p> <p>21 frequent cause of untreatable, sudden,</p> <p>22 irreversible vision loss in individuals older</p> <p>23 than 40; right?</p> <p>24 A. Well, depends what you mean by</p> <p>25 "frequent." I mean, it's not something you see</p>	<p>93</p> <p>1 Howard Pomeranz</p> <p>2 topic that talk about how common it is in the</p> <p>3 population.</p> <p>4 Q. One in 50,000 refers to Johnson and</p> <p>5 Arnold's paper; right?</p> <p>6 A. Yes.</p> <p>7 Q. And you're familiar with Hattenour's</p> <p>8 paper, who finds the incident to be 10.3 per</p> <p>9 100,000?</p> <p>10 A. Yes.</p> <p>11 Q. And that's one in 10,000; right?</p> <p>12 A. I think it's an overestimate, but</p> <p>13 that's what the calculation was.</p> <p>14 Q. And you haven't done any studies to</p> <p>15 determine the incident rate of NAION in the</p> <p>16 population; correct?</p> <p>17 A. No.</p> <p>18 Q. Now, there's four layers to the</p> <p>19 optic nerve head; right?</p> <p>20 A. Yes.</p> <p>21 Q. And there's the superficial layer;</p> <p>22 right? That's the one that you see when you look</p> <p>23 in the disc; right --</p> <p>24 A. Yes.</p> <p>25 Q. -- when you look in the eye?</p>

24 (Pages 90 to 93)

<p>94</p> <p>1 Howard Pomeranz</p> <p>2 Below that's the prelaminar; right?</p> <p>3 A. Yes.</p> <p>4 Q. And below that's the laminar</p> <p>5 cribrosa; correct?</p> <p>6 A. Yes.</p> <p>7 Q. And last is the retrolaminar layer;</p> <p>8 correct?</p> <p>9 A. Yes.</p> <p>10 Q. In which of those layers does NAION</p> <p>11 occur?</p> <p>12 A. I think it's not at the superficial</p> <p>13 level. I think it's at a deeper level than that.</p> <p>14 Q. And what do you rely on for that?</p> <p>15 A. Studies that have been done by other</p> <p>16 individuals who have done the science.</p> <p>17 Q. Which studies?</p> <p>18 A. Hayreh in particular. He's done the</p> <p>19 most work in this area.</p> <p>20 Q. You've not done any studies in this</p> <p>21 area; right?</p> <p>22 A. Other than the animal model that I</p> <p>23 described to you before.</p> <p>24 Q. And in the Bernstein rat model, were</p> <p>25 you able to determine which layer of the optic</p>	<p>96</p> <p>1 Howard Pomeranz</p> <p>2 in that patient?</p> <p>3 A. No.</p> <p>4 Q. And NAION's been recognized as a</p> <p>5 medical condition for several decades; is that</p> <p>6 fair?</p> <p>7 A. I don't know exactly how long. I</p> <p>8 think Hayreh said he actually coined the phrase.</p> <p>9 I don't remember exactly when that was.</p> <p>10 Q. It was before you were practicing?</p> <p>11 A. Yes.</p> <p>12 Q. And it was recognized as a medical</p> <p>13 condition long before Viagra came on the market;</p> <p>14 right?</p> <p>15 A. Yes.</p> <p>16 Q. Which vessels in your opinion are</p> <p>17 affected in NAION?</p> <p>18 A. The end arteries from the posterior</p> <p>19 ciliaries that profuse the disc.</p> <p>20 Q. What methods are there to measure</p> <p>21 blood flow in those arteries?</p> <p>22 A. I don't think there are.</p> <p>23 Q. It's your opinion that there are no</p> <p>24 methods -- there's no way to measure blood flow</p> <p>25 in the posterior ciliary arteries or just the end</p>
<p>95</p> <p>1 Howard Pomeranz</p> <p>2 nerve had -- was affected by ischemic optic</p> <p>3 neuropathy?</p> <p>4 A. Not that I recall. That wasn't the</p> <p>5 object of the study.</p> <p>6 Q. Just going back to some of the</p> <p>7 symptoms and factors of NAION, is there any</p> <p>8 way -- any relationship between what the disc</p> <p>9 looks like on exam and the extent of visual field</p> <p>10 loss?</p> <p>11 A. Often they will correlate, but not</p> <p>12 always.</p> <p>13 Q. How will they correlate?</p> <p>14 A. Well, for example, if the optic</p> <p>15 nerve is partially swollen, let's say along the</p> <p>16 superior aspect of the nerve, then it's very</p> <p>17 common to see a visual field defect that's down</p> <p>18 below the center. But it doesn't necessarily</p> <p>19 have to be the case. Sometimes there isn't an</p> <p>20 exact correlation between how much the nerve is</p> <p>21 swollen and how much of a visual field loss there</p> <p>22 is.</p> <p>23 Q. When you look into the eye and you</p> <p>24 examine the optic disc, can you determine just by</p> <p>25 looking at the disc what the cause of NAION was</p>	<p>97</p> <p>1 Howard Pomeranz</p> <p>2 arteries?</p> <p>3 A. My understanding is that in the end</p> <p>4 arteries, it's difficult, if not impossible, to</p> <p>5 do that because of either the lack of access or</p> <p>6 lack of reliability of the methods for measuring</p> <p>7 at that level deep within the optic nerve.</p> <p>8 Q. Are there techniques that allow you</p> <p>9 to measure blood flow in the PCAs?</p> <p>10 A. There probably are, but I'm not an</p> <p>11 expert of any sort in that area.</p> <p>12 Q. What methods are you aware of that</p> <p>13 measure the blood flow in the PCAs?</p> <p>14 A. I don't know the answer to that.</p> <p>15 Q. You say in your expert report on</p> <p>16 page 2 in the introduction, top paragraph -- I'll</p> <p>17 let you pull it out.</p> <p>18 (Pause from the record.)</p> <p>19 Q. In the middle you say this --</p> <p>20 "Conflicting data exists in the medical</p> <p>21 literature regarding the effect of sildenafil on</p> <p>22 blood flow in the eye. The studies of effects of</p> <p>23 ED drugs on ocular circulation were carried out</p> <p>24 with various methodologies, some of which have</p> <p>25 uncertain reliability and reproducibility and</p>

25 (Pages 94 to 97)

<p>98</p> <p>1 Howard Pomeranz</p> <p>2 yield different results in the hands of different</p> <p>3 investigators."</p> <p>4 Let's go back.</p> <p>5 Which studies are you referring to</p> <p>6 there?</p> <p>7 A. There are a whole pile of them in</p> <p>8 the information that I presented you.</p> <p>9 Q. Sitting here today, can you identify</p> <p>10 which ones you were talking about in this</p> <p>11 paragraph?</p> <p>12 A. No, I'd have to pull them out of the</p> <p>13 folder and look at all of them.</p> <p>14 Q. We can go through them.</p> <p>15 (Pomeranz 15, Article entitled, "The</p> <p>16 Effects of Sildenafil on Ocular Blood</p> <p>17 Flow," with Murat Koksas as the lead</p> <p>18 author, marked for identification.)</p> <p>19 MS. LESKIN: We've marked as</p> <p>20 Exhibit 15 an article entitled, "The</p> <p>21 Effects of Sildenafil on Ocular Blood</p> <p>22 Flow," with Murat Koksas as the lead</p> <p>23 author, from Acta Ophthalmologica</p> <p>24 Scandinavica, 2005.</p> <p>25 Q. Is this one of the articles you were</p>	<p>100</p> <p>1 Howard Pomeranz</p> <p>2 an article by Dr. Kurtulan from the</p> <p>3 International Journal of Impotence Research</p> <p>4 in 2004.</p> <p>5 Q. Is this one of the articles you</p> <p>6 referred to in paragraph 1 of your expert report?</p> <p>7 A. It may be. If you want me to go</p> <p>8 through my folder, I'll pull them all out for</p> <p>9 you.</p> <p>10 Q. Do you -- sitting here today, do you</p> <p>11 have any recollection of reviewing this article?</p> <p>12 (Witness peruses the exhibit.)</p> <p>13 A. I might have -- I may have.</p> <p>14 Q. The reason I ask is because there</p> <p>15 was no cites in paragraph 1 and none of these</p> <p>16 articles are listed in the references in the back</p> <p>17 of your report. So I'm just trying to figure out</p> <p>18 which ones you are relying on for that statement.</p> <p>19 And if you want, during a break, I'm</p> <p>20 happy to give you the box and you can take a look</p> <p>21 in there.</p> <p>22 If you look on page 247 of this</p> <p>23 article, under conclusions, the second sentence</p> <p>24 says, "Sildenafil has no effect on central</p> <p>25 retinal arterial circulation on the basis of</p>
<p>99</p> <p>1 Howard Pomeranz</p> <p>2 referring to in that paragraph?</p> <p>3 A. I don't know if I saw this paper</p> <p>4 before. I'd have to look in my folder and see if</p> <p>5 it's one of the ones that I looked at.</p> <p>6 Q. Sitting here today, do you have any</p> <p>7 recollection of reviewing this article?</p> <p>8 A. I don't remember specifically.</p> <p>9 Q. If you look at the abstract, the</p> <p>10 conclusion there says, "Sildenafil causes</p> <p>11 significant increase in blood flow in these</p> <p>12 arteries."</p> <p>13 Do you see that?</p> <p>14 A. Yes.</p> <p>15 Q. And do you know which arteries he's</p> <p>16 referring to here?</p> <p>17 A. He mentions in the result section</p> <p>18 ophthalmic artery and post -- short posterior</p> <p>19 ciliary artery measurements.</p> <p>20 Q. If you --</p> <p>21 (Pomeranz 16, Article by Dr.</p> <p>22 Kurtulan from the International Journal of</p> <p>23 Impotence Research in 2004, marked for</p> <p>24 identification.)</p> <p>25 MS. LESKIN: We marked as Exhibit 16</p>	<p>101</p> <p>1 Howard Pomeranz</p> <p>2 central Doppler ultrasonography."</p> <p>3 Do you see that sentence?</p> <p>4 A. Yes.</p> <p>5 (Pomeranz 17, Article entitled,</p> <p>6 "Sildenafil Does Not Alter Retrobulbar</p> <p>7 Hemodynamics in Postural Variations," by</p> <p>8 Dr. Taner in Neuro-Ophthalmology, 2005,</p> <p>9 marked for identification.)</p> <p>10 MS. LESKIN: We've marked as</p> <p>11 Exhibit 17, "Sildenafil Does Not Alter</p> <p>12 Retrobulbar Hemodynamics in Postural</p> <p>13 Variations," by Dr. Taner in</p> <p>14 Neuro-Ophthalmology 2005.</p> <p>15 Q. Is this one of the articles that you</p> <p>16 referred to in paragraph 1 of your expert report?</p> <p>17 A. No, I know I definitely have not</p> <p>18 seen this one.</p> <p>19 Q. If you look on page 63 of this</p> <p>20 report --</p> <p>21 MR. BECNEL: You're still on 63?</p> <p>22 MS. LESKIN: Page 63.</p> <p>23 MR. BECNEL: Which side?</p> <p>24 MS. LESKIN: That's why I'm looking</p> <p>25 to see where it is.</p>

26 (Pages 98 to 101)

<p style="text-align: right;">102</p> <p>1 Howard Pomeranz</p> <p>2 Q. The last sentence -- the bottom of</p> <p>3 the left column, the last full sentence says, "We</p> <p>4 observed that sildenafil did not change</p> <p>5 retrobulbar blood flow in the sitting position.</p> <p>6 Similarly, no changes were detected in the</p> <p>7 physiologic behavior of retrobulbar circulation</p> <p>8 in the supine position after sildenafil uptake."</p> <p>9 Do you see that conclusion?</p> <p>10 A. I see that.</p> <p>11 (Pomeranz 18, Article by Dr. Dundar,</p> <p>12 "Effect of Sildenafil on Ocular</p> <p>13 Hemodynamics," published in Eye, 2001,</p> <p>14 marked for identification.)</p> <p>15 MS. LESKIN: We marked as Exhibit 18</p> <p>16 an article by Dr. Dundar, "Effect of</p> <p>17 Sildenafil on Ocular Hemodynamics,"</p> <p>18 published in Eye, 2001.</p> <p>19 Q. Is this one of the articles you</p> <p>20 referred to in paragraph 1 of your report?</p> <p>21 A. I believe I've seen this one before.</p> <p>22 This looks familiar.</p> <p>23 Q. If you look at page 508 --</p> <p>24 MR. BECNEL: Where?</p> <p>25 MS. LESKIN: I'm focusing on the</p>	<p style="text-align: right;">104</p> <p>1 Howard Pomeranz</p> <p>2 Q. On page 754, on the right column,</p> <p>3 second paragraph, Dr. Grunwald concludes, "In</p> <p>4 contrast to our previous studies on the effect of</p> <p>5 nitrates, our current study does not show any</p> <p>6 significant effect of sildenafil on choroidal or</p> <p>7 optic nerve head blood flow."</p> <p>8 Right?</p> <p>9 A. That's what it says.</p> <p>10 (Pomeranz 20, Article by Dr.</p> <p>11 Metelitsina and colleagues, "Effect of</p> <p>12 Viagra on the Foveolar Choroidal</p> <p>13 Circulation of AMD Patients," published in</p> <p>14 Experimental Eye Research, 2005, marked for</p> <p>15 identification.)</p> <p>16 MS. LESKIN: We marked as Exhibit 20</p> <p>17 an article by Dr. Metelitsina and</p> <p>18 colleagues, "Effect of Viagra on the</p> <p>19 Foveolar Choroidal Circulation of AMD</p> <p>20 Patients," published in Experimental Eye</p> <p>21 Research, 2005.</p> <p>22 Q. Was this one of the studies that you</p> <p>23 referred to in paragraph 1 of your report?</p> <p>24 A. No, I've never seen this before.</p> <p>25 Q. Take your time. And you can spend</p>
<p style="text-align: right;">103</p> <p>1 Howard Pomeranz</p> <p>2 right column, top paragraph.</p> <p>3 Q. And there's a lot of abbreviations</p> <p>4 here, but I think what it says -- and I'll read</p> <p>5 it and you can check my interpretation:</p> <p>6 "After sildenafil administration,</p> <p>7 peak systolic velocity, end diastolic velocity,</p> <p>8 mean velocity significantly increased in the</p> <p>9 ophthalmic artery of both eyes."</p> <p>10 You see that conclusion?</p> <p>11 A. Yes.</p> <p>12 (Pomeranz 19, Article by Dr.</p> <p>13 Grunwald, et al., "The Effect of Sildenafil</p> <p>14 Citrate (Viagra) on the Ocular</p> <p>15 Circulation," published in the American</p> <p>16 Journal of Ophthalmology, 2001, marked for</p> <p>17 identification.)</p> <p>18 MS. LESKIN: Marked as Exhibit 19 is</p> <p>19 an article by Dr. Grunwald, et al., "The</p> <p>20 Effect of Sildenafil Citrate (Viagra) on</p> <p>21 the Ocular Circulation," published in the</p> <p>22 American Journal of Ophthalmology, 2001.</p> <p>23 Q. Is this one of the articles you</p> <p>24 referred to in paragraph 1 of your expert report?</p> <p>25 A. Yes.</p>	<p style="text-align: right;">105</p> <p>1 Howard Pomeranz</p> <p>2 as much time as you need looking through it. I'm</p> <p>3 going to focus you on page 163 on the left</p> <p>4 column.</p> <p>5 (Witness peruses the exhibit.)</p> <p>6 MR. BECNEL: Which one, Lori? I'm</p> <p>7 sorry.</p> <p>8 MS. LESKIN: Page 163 on the left</p> <p>9 column.</p> <p>10 Q. First full paragraph there on the</p> <p>11 left says, "Our results do not show any</p> <p>12 statistically significant change in the choroidal</p> <p>13 circulation in spite of the significant decrease</p> <p>14 in mean blood pressure and perfusion pressure at</p> <p>15 30 minutes."</p> <p>16 Do you see that conclusion?</p> <p>17 A. I see it.</p> <p>18 (Pomeranz 21, Article by Dr.</p> <p>19 Grunwald and colleagues, "Effect of</p> <p>20 Sildenafil Citrate (Viagra) on Retinal</p> <p>21 Blood Pressure Diameter," published in 2002</p> <p>22 in the American Journal of Ophthalmology,</p> <p>23 marked for identification.)</p> <p>24 (Witness peruses the exhibit.)</p> <p>25 Q. I've given you what we marked as</p>

<p style="text-align: right;">106</p> <p>1 Howard Pomeranz</p> <p>2 Exhibit 21, another article by Dr. Grunwald and</p> <p>3 colleagues, "Effect of Sildenafil Citrate</p> <p>4 (Viagra) on Retinal Blood Pressure Diameter,"</p> <p>5 published in 2002 in the American Journal of</p> <p>6 Ophthalmology.</p> <p>7 Is this one of the articles that you</p> <p>8 reference in paragraph 1 of your expert report?</p> <p>9 A. Yes.</p> <p>10 Q. And if you turn to page 810, under</p> <p>11 results, second sentence says, "In comparison</p> <p>12 with placebo, no statistically significant change</p> <p>13 in average vessel diameter was observed for the</p> <p>14 superior retinal temporal vein, the inferior</p> <p>15 retinal temporal vein, and the retinal temporal</p> <p>16 artery after sildenafil treatment."</p> <p>17 Do you see that conclusion?</p> <p>18 A. I see it.</p> <p>19 (Pomeranz 22, Article by Dr. Paris,</p> <p>20 "Sildenafil Increases Ocular Perfusion,"</p> <p>21 published in International Ophthalmology in</p> <p>22 2001, marked for identification.)</p> <p>23 MS. LESKIN: We marked as Pomeranz</p> <p>24 Exhibit 22 an article by Dr. Paris,</p> <p>25 "Sildenafil Increases Ocular Perfusion,"</p>	<p style="text-align: right;">108</p> <p>1 Howard Pomeranz</p> <p>2 specifically.</p> <p>3 Q. And were you at the 2000 ARVO</p> <p>4 meeting?</p> <p>5 A. Let's see. I would have been in</p> <p>6 Maryland at the time. I don't think so. Not</p> <p>7 that I recall specifically.</p> <p>8 Q. I'll turn your attention to</p> <p>9 page 174. Just looking at the results, it says,</p> <p>10 "The 12 subjects demonstrated significant mean</p> <p>11 increase in pulsatile ocular blood flow."</p> <p>12 Do you see that?</p> <p>13 A. Yes.</p> <p>14 (Pomeranz 23, Article by Dr. Pache</p> <p>15 entitled, "Sildenafil Induces Retinal</p> <p>16 Vasodilatation in Healthy Subjects,"</p> <p>17 published in the British Journal of</p> <p>18 Ophthalmology, 2002, marked for</p> <p>19 identification.)</p> <p>20 MS. LESKIN: We've marked as</p> <p>21 Exhibit 23 an article by Dr. Pache</p> <p>22 entitled, "Sildenafil Induces Retinal</p> <p>23 Vasodilatation in Healthy Subjects,"</p> <p>24 published in the British Journal of</p> <p>25 Ophthalmology, 2002.</p>
<p style="text-align: right;">107</p> <p>1 Howard Pomeranz</p> <p>2 published in International Ophthalmology in</p> <p>3 2001.</p> <p>4 Q. And there's an asterisk that says,</p> <p>5 "This study was published as a letter in the New</p> <p>6 England Journal of Medicine in 2000 and presented</p> <p>7 as a poster at the American Academy of</p> <p>8 Ophthalmology in 2000 and as a free paper at the</p> <p>9 2000 ARVO meeting, obviously in 2000.</p> <p>10 Was this article in any of its forms</p> <p>11 one of the studies that you referred to in the</p> <p>12 first paragraph of your expert report?</p> <p>13 A. Yes, I've seen this before in some</p> <p>14 form or another.</p> <p>15 Q. Do you know which version you would</p> <p>16 have seen it as?</p> <p>17 A. It might have been this publication.</p> <p>18 Again, I think I have a copy of it in my folder.</p> <p>19 Q. Were you at the American Academy of</p> <p>20 Ophthalmology meeting in Dallas, Texas, in 2000?</p> <p>21 A. Yes, I think that's where I actually</p> <p>22 presented my paper of a poster of cases.</p> <p>23 Q. And did you receive this poster from</p> <p>24 Dr. Sponsel?</p> <p>25 A. I might have. I don't recall</p>	<p style="text-align: right;">109</p> <p>1 Howard Pomeranz</p> <p>2 Q. Is this one of the studies that you</p> <p>3 refer to in paragraph 1 of your expert report?</p> <p>4 A. I believe so. I think I've seen</p> <p>5 this before.</p> <p>6 Q. If you look at just even the</p> <p>7 abstract, under conclusion, it says, "Sildenafil</p> <p>8 causes a significant dilation of retinal arteries</p> <p>9 and veins in healthy subjects."</p> <p>10 Do you see that conclusion?</p> <p>11 A. Yes.</p> <p>12 MS. LESKIN: This is the last study</p> <p>13 I'm going to mark right now.</p> <p>14 (Pomeranz 24, Article by Dr. Palak,</p> <p>15 "Effects of Sildenafil on Retinal Blood</p> <p>16 Flow and Flicker-Induced Retinal</p> <p>17 Vasodilation in Healthy Subjects,"</p> <p>18 published in Investigative Ophthalmology</p> <p>19 and Visual Science, November 2003, marked</p> <p>20 for identification.)</p> <p>21 MS. LESKIN: We marked as Exhibit 24</p> <p>22 an article by Dr. Palak, "Effects of</p> <p>23 Sildenafil on Retinal Blood Flow and</p> <p>24 Flicker-Induced Retinal Vasodilation in</p> <p>25 Healthy Subjects," published in</p>

28 (Pages 106 to 109)

<p style="text-align: right;">110</p> <p>1 Howard Pomeranz</p> <p>2 Investigative Ophthalmology and Visual</p> <p>3 Science, November 2003.</p> <p>4 Q. Is this one of the studies that you</p> <p>5 referred to in the first paragraph of your</p> <p>6 report?</p> <p>7 A. I think I've seen this one before.</p> <p>8 I'm not 100 percent sure.</p> <p>9 Q. Again just referring briefly to the</p> <p>10 abstract, under conclusions, "The data indicate</p> <p>11 that sildenafil increases retinal venous</p> <p>12 diameters and retinal blood flow in healthy</p> <p>13 subjects."</p> <p>14 Do you see that conclusion?</p> <p>15 A. I see it.</p> <p>16 Q. I want to direct your attention back</p> <p>17 to Dr. Koksai's paper, which was Exhibit 15. If</p> <p>18 you look at the right-hand-most column on</p> <p>19 page 358, and the second sentence, Dr. Koksai</p> <p>20 writes, "However, sildenafil has not been found</p> <p>21 to cause any decrease in ocular blood flow."</p> <p>22 Do you see that sentence?</p> <p>23 A. I see it.</p> <p>24 Q. Are you aware of any study measuring</p> <p>25 blood flow to the eyes after Viagra use that</p>	<p style="text-align: right;">112</p> <p>1 Howard Pomeranz</p> <p>2 Q. Or in your knowledge.</p> <p>3 Are you aware of any study that</p> <p>4 shows that Viagra causes a decrease in blood flow</p> <p>5 to the eyes?</p> <p>6 A. There may be in some of the papers</p> <p>7 that I have in my file. I need to look at the</p> <p>8 material to answer your question.</p> <p>9 Q. And short of that, you can't</p> <p>10 identify an article off the top of your head; is</p> <p>11 that right?</p> <p>12 A. No.</p> <p>13 Q. Are you aware of any studies that</p> <p>14 show that Viagra causes a decrease in blood flow</p> <p>15 to any tissue in the body?</p> <p>16 A. I think the only literature that</p> <p>17 I've looked at has been with respect to the eye,</p> <p>18 so I don't know about other parts of the body.</p> <p>19 Q. So are you aware of any studies</p> <p>20 showing that Viagra improves blood flow to the</p> <p>21 heart?</p> <p>22 A. If there is, I am not familiar with</p> <p>23 that literature.</p> <p>24 Q. Are you familiar with any studies</p> <p>25 showing Viagra causes improved blood flow to the</p>
<p style="text-align: right;">111</p> <p>1 Howard Pomeranz</p> <p>2 shows a decrease in blood flow?</p> <p>3 A. I have to look through the papers</p> <p>4 and look at all the conclusions.</p> <p>5 Q. We can certainly allow you to do</p> <p>6 that during the break, but as you sit here today,</p> <p>7 are you aware of any study that contradicts what</p> <p>8 Dr. Koksai says here?</p> <p>9 MR. BECNEL: Let me enter an</p> <p>10 objection.</p> <p>11 Counsel, you've taken his file. He</p> <p>12 doesn't have it. He said he needs it to be</p> <p>13 able to check it. And you want him to make</p> <p>14 a definitive statement. That's not fair to</p> <p>15 the witness.</p> <p>16 MS. LESKIN: I'll repeat my</p> <p>17 question.</p> <p>18 Q. As you sit here today, and again,</p> <p>19 we'll allow you to -- you can certainly take a</p> <p>20 look at your documents during the break, but</p> <p>21 sitting here right now, can you identify any</p> <p>22 study that contradicts what Dr. Koksai writes in</p> <p>23 this article?</p> <p>24 A. You mean out of the papers that you</p> <p>25 provided me to look at?</p>	<p style="text-align: right;">113</p> <p>1 Howard Pomeranz</p> <p>2 lungs?</p> <p>3 A. Only tangentially in that I know</p> <p>4 that a form of sildenafil -- was it Revatio --</p> <p>5 Q. Revatio?</p> <p>6 A. -- or something like that has been</p> <p>7 approved for pulmonary hypertension, so I know</p> <p>8 there's been some role for that.</p> <p>9 Q. Have you read any of the studies</p> <p>10 supporting the indication of sildenafil for the</p> <p>11 treatment of pulmonary hypertension?</p> <p>12 A. I think I'm aware of it in general,</p> <p>13 but I'm not familiar with the specific studies.</p> <p>14 Q. Are you aware of any study showing</p> <p>15 improved blood flow in patients with Raynaud's</p> <p>16 Syndrome?</p> <p>17 A. No.</p> <p>18 Q. You make reference in your report to</p> <p>19 case reports of stroke. Is it your testimony --</p> <p>20 is it your opinion that Viagra can cause stroke?</p> <p>21 A. I think there are cases in the</p> <p>22 literature similar to the case reports with</p> <p>23 ischemic optic neuropathy where that's been</p> <p>24 reported. So there's been an association between</p> <p>25 taking the drug and developing a TIA or a stroke</p>

<p style="text-align: right;">114</p> <p>1 Howard Pomeranz</p> <p>2 and cases that have been reported.</p> <p>3 Q. Let me ask you this way: Do you</p> <p>4 have an opinion of whether Viagra can cause</p> <p>5 stroke?</p> <p>6 A. I know that there are cases that</p> <p>7 have been described. Whether there's an exact</p> <p>8 cause and effect directly between the two is not</p> <p>9 really my area of expertise as far as strokes are</p> <p>10 concerned.</p> <p>11 Q. So let me just ask my question</p> <p>12 again, then.</p> <p>13 Do you have an opinion as to whether</p> <p>14 Viagra can cause stroke?</p> <p>15 MR. BECNEL: Let me enter an</p> <p>16 objection.</p> <p>17 It's repetitious. He said it's not</p> <p>18 his area of expertise.</p> <p>19 JUDGE BORG: Overruled.</p> <p>20 He can answer the question, if he's</p> <p>21 able to.</p> <p>22 A. I think that Dr. Egan and I wrote a</p> <p>23 brief letter to the editor about one of the cases</p> <p>24 about that. And to the extent that we expressed</p> <p>25 an opinion about it in that paper, I think that's</p>	<p style="text-align: right;">116</p> <p>1 Howard Pomeranz</p> <p>2 Viagra caused this man's stroke?</p> <p>3 A. I think the most we can say here,</p> <p>4 because not enough is known about it, that it</p> <p>5 appears to be associated. I don't think we made</p> <p>6 any statement as to causality.</p> <p>7 Q. Let's go back to my question when we</p> <p>8 started off here.</p> <p>9 Do you have an opinion -- it could</p> <p>10 be yes, it could be no. Do you have an opinion</p> <p>11 as to whether Viagra can cause a stroke?</p> <p>12 A. I don't have a specific opinion, but</p> <p>13 I think the case studies here have suggested a</p> <p>14 possible association that needs to be further</p> <p>15 explored.</p> <p>16 Q. So is that a no?</p> <p>17 MR. BECNEL: I'll enter an</p> <p>18 objection.</p> <p>19 His answer is his answer, Counsel.</p> <p>20 A. I mean, I don't have an opinion yes</p> <p>21 or no. I don't think there's enough data out</p> <p>22 there to give you a definitive conclusion. I</p> <p>23 think further study is indicated.</p> <p>24 Q. Have you looked at any of the</p> <p>25 literature looking at the incidence of stroke</p>
<p style="text-align: right;">115</p> <p>1 Howard Pomeranz</p> <p>2 all I really have to say about it.</p> <p>3 (Pomeranz 25, Letter to the Editor</p> <p>4 signed by Robert A. Egan and Howard</p> <p>5 Pomeranz, appearing in Neurology in 2002,</p> <p>6 entitled, "Transient Ischemic Attack and</p> <p>7 Stroke Associated with Sildenafil (Viagra)</p> <p>8 Use," marked for identification.)</p> <p>9 MS. LESKIN: We've marked as</p> <p>10 Exhibit 25 a letter to the editor signed by</p> <p>11 Robert A. Egan and Howard Pomeranz,</p> <p>12 appearing in Neurology in 2002, entitled,</p> <p>13 "Transient Ischemic Attack and Stroke</p> <p>14 Associated with Sildenafil (Viagra) Use."</p> <p>15 Q. Is this the letter to the editor you</p> <p>16 just referred to?</p> <p>17 A. Yes.</p> <p>18 Q. Now, what you say in the second</p> <p>19 paragraph here is, "This is not to say that we</p> <p>20 believe sildenafil was not associated with this</p> <p>21 patient's stroke; however, the etiology may be</p> <p>22 something other than hypotension."</p> <p>23 Right? That's what you wrote?</p> <p>24 A. That's what I wrote.</p> <p>25 Q. Did you have an opinion whether</p>	<p style="text-align: right;">117</p> <p>1 Howard Pomeranz</p> <p>2 among men taking Viagra?</p> <p>3 A. What I've looked at are reports of</p> <p>4 neurological events, whether they're stroke or</p> <p>5 something else that have been reported to be an</p> <p>6 association with taking Viagra. And they are</p> <p>7 what they are. They're case reports.</p> <p>8 Q. Have you looked at any of the</p> <p>9 clinical studies that have been done on Viagra</p> <p>10 that look that the incidence of stroke?</p> <p>11 A. No.</p> <p>12 Q. Were you aware that those studies</p> <p>13 exist?</p> <p>14 A. No.</p> <p>15 Q. Did you ever look to see whether</p> <p>16 those studies exist?</p> <p>17 A. This editorial -- our letter to the</p> <p>18 editor was primarily written by Dr. Egan with</p> <p>19 some input from me. And he's a neurologist and I</p> <p>20 am not. So I don't think I personally have done</p> <p>21 any studies along that -- along those lines, but</p> <p>22 Dr. Egan may have.</p> <p>23 Q. My question was simple.</p> <p>24 Did you ever look to see whether any</p> <p>25 studies regarding -- clinical studies on Viagra</p>

30 (Pages 114 to 117)

<p>118</p> <p>1 Howard Pomeranz</p> <p>2 that looked at the incidence of stroke, did you</p> <p>3 ever look to see whether those studies existed?</p> <p>4 A. If I ever looked, I don't know.</p> <p>5 Have I found any and read any, not that I recall.</p> <p>6 (Pomeranz 26, Article by Dr. Randall</p> <p>7 Zusman and colleagues, from the American</p> <p>8 Journal of Cardiology entitled, "Overall</p> <p>9 Cardiovascular Profile of Sildenafil</p> <p>10 Citrate," published in 1999, marked for</p> <p>11 identification.)</p> <p>12 MS. LESKIN: We've marked as</p> <p>13 Exhibit 26 an article by Dr. Randall Zusman</p> <p>14 and colleagues, from the American Journal</p> <p>15 of Cardiology entitled, "Overall</p> <p>16 Cardiovascular Profile of Sildenafil</p> <p>17 Citrate," published in 1999.</p> <p>18 (Witness peruses the exhibit.)</p> <p>19 Q. Sir, have you ever seen this article</p> <p>20 before?</p> <p>21 A. No.</p> <p>22 Q. I'll give you a minute to take a</p> <p>23 look through it, if you'd like.</p> <p>24 MR. BECNEL: It will take more than</p> <p>25 a minute. It will take some time to look</p>	<p>120</p> <p>1 Howard Pomeranz</p> <p>2 41C?</p> <p>3 A. I'm just there now.</p> <p>4 Q. Okay.</p> <p>5 (Witness peruses the exhibit.)</p> <p>6 Q. Have you read that section?</p> <p>7 A. As much as I can in a short period</p> <p>8 of time.</p> <p>9 Q. I'll ask a question and if you need</p> <p>10 to take a closer look, you just tell me you need</p> <p>11 to take a closer look at the article and we'll</p> <p>12 give you the time you need.</p> <p>13 A. All right.</p> <p>14 Q. Okay. This section that I've just</p> <p>15 directed you to is reporting on double-blind</p> <p>16 placebo-controlled studies that were conducted</p> <p>17 using sildenafil; correct?</p> <p>18 A. That's what it says in the first</p> <p>19 paragraph on 40C and the title.</p> <p>20 Q. And if you look on page 41C, towards</p> <p>21 the bottom, there's a sentence that reads,</p> <p>22 "Similarly, the incidences of strokes were</p> <p>23 consistent across double-blind studies in</p> <p>24 sildenafil-treated, 0.4 per hundred patient</p> <p>25 years, 95 percent confidence interval, negative</p>
<p>119</p> <p>1 Howard Pomeranz</p> <p>2 through it.</p> <p>3 (Witness peruses the exhibit.)</p> <p>4 Q. Just to direct you, I'm looking at</p> <p>5 page 41C in particular. It's a section that</p> <p>6 starts on the bottom of the prior page called,</p> <p>7 "Serious Cardiovascular Events."</p> <p>8 MR. BECNEL: Counsel, I don't</p> <p>9 believe anybody has had a chance to read</p> <p>10 this yet, and I'm still just picking and</p> <p>11 choosing parts.</p> <p>12 MS. LESKIN: That's why I helped</p> <p>13 direct the witness.</p> <p>14 MR. BECNEL: It's not a question</p> <p>15 whether you helped direct the witness.</p> <p>16 It's whether we've had the opportunities to</p> <p>17 read something we've not seen. You're not</p> <p>18 entitled to examine a witness until the</p> <p>19 fact is that we get to read it.</p> <p>20 MS. LESKIN: I haven't asked a</p> <p>21 single question yet, Mr. Becnel.</p> <p>22 Q. Did you look at the section at</p> <p>23 least, Doctor, that's entitled "Serious</p> <p>24 Cardiovascular Events" that starts at the bottom</p> <p>25 of page 40C and continues on the left column of</p>	<p>121</p> <p>1 Howard Pomeranz</p> <p>2 0.1 to 0.9" -- I'm not sure if I'm reading that</p> <p>3 correctly -- "and placebo-treated patients, 0.9</p> <p>4 per 100 patient years. And in open-label</p> <p>5 sildenafil studies, 0.3 per hundred patient</p> <p>6 years."</p> <p>7 Do you see that?</p> <p>8 A. Yes.</p> <p>9 Q. From those numbers, can you tell me</p> <p>10 whether there is an elevated rate of stroke among</p> <p>11 patients taking sildenafil as compared to</p> <p>12 patients taking placebo?</p> <p>13 (Witness peruses the exhibit.)</p> <p>14 A. It states it's 0.4 per 100 in</p> <p>15 sildenafil and 0.9 in placebo, so it seems to be</p> <p>16 less.</p> <p>17 Q. Are you aware of any study to the</p> <p>18 contrary regarding the rate of stroke among</p> <p>19 patients taking Viagra?</p> <p>20 MR. BECNEL: Objection.</p> <p>21 A. Well, since I'm not familiar with</p> <p>22 the literature, I can't answer your question and</p> <p>23 say that I do, since I'm not familiar with it.</p> <p>24 Q. So you're not familiar -- you're not</p> <p>25 aware of any other studies?</p>

<p style="text-align: right;">122</p> <p>1 Howard Pomeranz</p> <p>2 A. No, because I have not reviewed the</p> <p>3 literature.</p> <p>4 Q. Let's go back and talk about NAION</p> <p>5 for a moment.</p> <p>6 The mechanism of NAION is not well</p> <p>7 understood; right?</p> <p>8 A. Correct.</p> <p>9 Q. The risk factors for NAION are not</p> <p>10 well understood, are they?</p> <p>11 A. Well, some I think have been</p> <p>12 identified in some studies, but there's</p> <p>13 controversy about that as well.</p> <p>14 Q. So they're not well understood?</p> <p>15 A. Yes.</p> <p>16 Q. Yes, they are or, yes, they're not?</p> <p>17 A. I think some have been identified as</p> <p>18 more highly correlative than others, in general</p> <p>19 scheme of things.</p> <p>20 (Pomeranz 27, Article in 2006 Brain</p> <p>21 Research entitled, "Histologic and</p> <p>22 Morphometric Evaluation of Transient</p> <p>23 Retinal and Optic Nerve Ischemia in Rat,"</p> <p>24 by Dr. Danylkova and Dr. Pomeranz and</p> <p>25 others, marked for identification.)</p>	<p style="text-align: right;">124</p> <p>1 Howard Pomeranz</p> <p>2 really developed it. Using the model that he</p> <p>3 developed.</p> <p>4 Q. if you look at the top of page 21,</p> <p>5 that first full sentence on that page, left</p> <p>6 column, says, "Currently there is no effective</p> <p>7 treatment for this condition" -- referring to</p> <p>8 NAION -- "in part because the mechanisms and risk</p> <p>9 factors that produce the disease are not well</p> <p>10 understood."</p> <p>11 That's what you wrote; correct?</p> <p>12 A. Correct.</p> <p>13 Q. Is it your belief that the Bernstein</p> <p>14 rat model is an accurate portrayal of the cause</p> <p>15 of NAION?</p> <p>16 A. No. I think it's at best a good</p> <p>17 approximation. I think everyone understands</p> <p>18 that.</p> <p>19 Q. And can that model be used to</p> <p>20 determine whether an outside factor can cause the</p> <p>21 disease?</p> <p>22 A. Well, I think the purpose of trying</p> <p>23 to develop that model was to see if, by</p> <p>24 introducing other substances, either as something</p> <p>25 that might be protective or potentially damaging</p>
<p style="text-align: right;">123</p> <p>1 Howard Pomeranz</p> <p>2 MS. LESKIN: We marked as Exhibit 26</p> <p>3 an article from Brain Research in 2006,</p> <p>4 "Histological and Morphometric Evaluation</p> <p>5 of Transient Retinal and Optic Nerve</p> <p>6 Ischemia in Rat."</p> <p>7 MR. PENTON: Isn't that 27?</p> <p>8 MS. LESKIN: 27.</p> <p>9 MR. PENTON: I don't know. Maybe.</p> <p>10 THE WITNESS: This one was 26.</p> <p>11 MS. LESKIN: Okay. I'm sorry.</p> <p>12 Let's change that one. You're right. Let</p> <p>13 me start that again.</p> <p>14 We've marked as Exhibit 27 an</p> <p>15 article in 2006 Brain Research entitled,</p> <p>16 "Histologic and Morphometric Evaluation of</p> <p>17 Transient Retinal and Optic Nerve Ischemia</p> <p>18 in Rat," by Dr. Danylkova and Dr. Pomeranz</p> <p>19 and others.</p> <p>20 Q. This is your study; correct?</p> <p>21 A. Yes.</p> <p>22 Q. And this is what we were referring</p> <p>23 to earlier, doing some investigative work on the</p> <p>24 rat model that you helped develop; correct?</p> <p>25 A. Well, it was Dr. Bernstein who</p>	<p style="text-align: right;">125</p> <p>1 Howard Pomeranz</p> <p>2 to the optic nerve -- a model in which to study</p> <p>3 that kind of paradigm.</p> <p>4 Q. But the rat model doesn't completely</p> <p>5 mimic the disease pathophysiology, does it?</p> <p>6 A. No. I think it's a very difficult</p> <p>7 thing to do. You either have to be a very</p> <p>8 experienced microsurgeon or have other access to</p> <p>9 those deeper vessels to really produce a true</p> <p>10 model for the disease. So I think anything that</p> <p>11 anyone comes up with is at best an approximation.</p> <p>12 Q. And does the Bernstein rat model</p> <p>13 help you see what occurs to the optic nerve from</p> <p>14 a histopathological standpoint following the</p> <p>15 insult?</p> <p>16 A. Yes. It was really a means to study</p> <p>17 what kind of damage occurs to the nerve itself</p> <p>18 and to see if it might be used as a means to test</p> <p>19 different substances that might help to decrease</p> <p>20 the likelihood of damage in a situation where</p> <p>21 the -- where the circulation to the optic nerve</p> <p>22 is compromised in some way.</p> <p>23 Q. And is it, in your view, an accurate</p> <p>24 portrayal of how NAION progresses then?</p> <p>25 A. Well, I think, given the fact that</p>

<p style="text-align: right;">126</p> <p>1 Howard Pomeranz</p> <p>2 it's impossible to get exactly to these blood</p> <p>3 vessels that we're talking about other than</p> <p>4 through microsurgical techniques, you have to</p> <p>5 develop something that is a good approximation of</p> <p>6 what you hope to study.</p> <p>7 One could argue that the rat isn't</p> <p>8 the best model for studying this disease either</p> <p>9 and it might be better suited to studying it in</p> <p>10 monkeys, but you have to do the best with what</p> <p>11 you have to do research.</p> <p>12 Q. Have you attempted to reproduce that</p> <p>13 model in a monkey?</p> <p>14 A. I know Dr. Bernstein has. I don't</p> <p>15 have the facilities where I am now, nor the</p> <p>16 resources, to do that.</p> <p>17 Q. Do you know the results of</p> <p>18 Dr. Bernstein's work on that?</p> <p>19 A. Well, I know he just presented his</p> <p>20 research at ARVO this year and at least seemed to</p> <p>21 show that it was a successful translation of that</p> <p>22 model from the rodent to the primate. And I</p> <p>23 think the work that he presented of course was</p> <p>24 preliminary and much more works needs to be done.</p> <p>25 Q. Using Bernstein's rat model, can you</p>	<p style="text-align: right;">128</p> <p>1 Howard Pomeranz</p> <p>2 So there's some variability</p> <p>3 obviously, when doing experiments on rodents,</p> <p>4 with doing some of those kinds of experiments.</p> <p>5 Q. The rats that were used in either</p> <p>6 Bernstein's original development of the model or</p> <p>7 any of the work that you have done since then</p> <p>8 using that model, are they healthy rats? Are</p> <p>9 they atherosclerotic rats? What kind of shape</p> <p>10 are the rats in before you impose the insult?</p> <p>11 A. Healthy rats.</p> <p>12 Q. If you're doing -- strike that.</p> <p>13 Have you looked at any of the animal</p> <p>14 studies that Pfizer did on sildenafil during the</p> <p>15 drug's development?</p> <p>16 A. Only to the extent of some of these</p> <p>17 studies that I mentioned before that may have</p> <p>18 been available by public access that I may have</p> <p>19 looked at three, four, five years ago.</p> <p>20 Q. And which studies would those have</p> <p>21 been, as far as you recall?</p> <p>22 A. It's been so long since I've looked</p> <p>23 at them, I'd really have to look at my data. But</p> <p>24 I know there were some studies I think that were</p> <p>25 done in animals. I know there were some that</p>
<p style="text-align: right;">127</p> <p>1 Howard Pomeranz</p> <p>2 estimate how long after the insult it takes to</p> <p>3 see damage in the optic nerve?</p> <p>4 A. Well, the swelling occurs in the</p> <p>5 optic nerve certainly within 24 hours. The</p> <p>6 actual dropout or death or damage to the axons in</p> <p>7 the optic nerve occur over the course of days to</p> <p>8 weeks after that.</p> <p>9 And I think Dr. Bernstein just</p> <p>10 recently showed there are actually two phases.</p> <p>11 One phase occurs within a very short period of</p> <p>12 time, a week or two, and then there's a later</p> <p>13 phase that occurs after that.</p> <p>14 Q. Dr. Bernstein refers to changes in</p> <p>15 the optic nerve, in the axons. Are there also</p> <p>16 changes to the retinal layers that occur</p> <p>17 following the ischemic insult?</p> <p>18 A. I think there have been some</p> <p>19 conflicted results with that in our hands and our</p> <p>20 laboratory. There seem to be some experimental</p> <p>21 results that suggested it -- that it may have</p> <p>22 been a factor of how well the laser was applied</p> <p>23 just to the surface of the optic nerve rather</p> <p>24 than to some of the retinene that surrounded the</p> <p>25 optic nerve.</p>	<p style="text-align: right;">129</p> <p>1 Howard Pomeranz</p> <p>2 were clinical trials. Whatever might have been</p> <p>3 accessible that I could look at, I tried to do as</p> <p>4 thorough a review as I could at the time, three</p> <p>5 or four years ago.</p> <p>6 Q. Did you look at any of the</p> <p>7 histopathological examination results that were</p> <p>8 done on those animals?</p> <p>9 A. I think only inasmuch as there might</p> <p>10 have been a description in some of the reports of</p> <p>11 what was there. I don't think I looked -- I</p> <p>12 mean, I didn't have access to the data itself,</p> <p>13 just what was -- whatever was written in the</p> <p>14 reports.</p> <p>15 Q. And none of that was provided to you</p> <p>16 in connection with this litigation?</p> <p>17 A. No.</p> <p>18 Q. We had some discussion of some of</p> <p>19 the risk factors that have been identified in the</p> <p>20 literature, or potential risk factors; right?</p> <p>21 A. Well, I don't think we discussed</p> <p>22 them individually, but, yes.</p> <p>23 Q. But you mentioned -- and you told me</p> <p>24 that some of them are better characterized than</p> <p>25 others; right?</p>

<p>130</p> <p>1 Howard Pomeranz</p> <p>2 A. Yes.</p> <p>3 Q. Do you believe that high blood</p> <p>4 pressure increase the risk of NAION?</p> <p>5 A. Well, patients who are being treated</p> <p>6 for high blood pressure may be at risk. It may</p> <p>7 not be that the blood pressure is high at the</p> <p>8 time when it occurs. And Hayreh studies</p> <p>9 certainly suggest that actually treatment of the</p> <p>10 high blood pressure with medications that may</p> <p>11 actually lower the blood pressure, the so-called</p> <p>12 nocturnal hypotension that he's mentioned, may be</p> <p>13 the risk factor.</p> <p>14 Q. Other than Dr. Hayreh's work on</p> <p>15 nocturnal hypotension, are you aware of any other</p> <p>16 studies that show nocturnal hypotension as a risk</p> <p>17 factor for NAION?</p> <p>18 A. I don't think anyone else has had</p> <p>19 the large population that he's had where he's</p> <p>20 made those conclusions. So I think other people</p> <p>21 have either concurred or disagreed with that, but</p> <p>22 I'm not sure I've seen any reports where other</p> <p>23 people have had an extensive number of patients</p> <p>24 that they've looked at in a prospective fashion</p> <p>25 that Dr. Hayreh has.</p>	<p>132</p> <p>1 Howard Pomeranz</p> <p>2 Q. You wrote in your report, in</p> <p>3 discussing risk factors, "These factors are all</p> <p>4 possibly abnormally affected in individuals</p> <p>5 with" -- referring to blood flow -- "These</p> <p>6 factors are all possibly abnormally affected in</p> <p>7 individuals with microvascular disease, such as</p> <p>8 hypertension and diabetes, commonly present in</p> <p>9 patients with NAION and can be considered</p> <p>10 predisposing factors for NAION."</p> <p>11 So is hypertension considered a risk</p> <p>12 factor for NAION?</p> <p>13 A. Well, it's a factor that you</p> <p>14 identify in the history of patients who you see</p> <p>15 who commonly present with this disease.</p> <p>16 Q. So if a patient walked in to your</p> <p>17 office with NAION and gave you a history of</p> <p>18 hypertension, would you consider that as one of</p> <p>19 the causes or potential causes of his NAION?</p> <p>20 A. Well, I'd say -- I'd call it one of</p> <p>21 the risk factors that's identified with patients.</p> <p>22 Whether in and of itself was the cause or not, as</p> <p>23 opposed to a combination of other things, is hard</p> <p>24 to say. But when you take a patient's history</p> <p>25 and you ask them, What have you been under a</p>
<p>131</p> <p>1 Howard Pomeranz</p> <p>2 Q. So do you believe that hypertension</p> <p>3 in and of itself is a risk factor for NAION?</p> <p>4 A. Well, it is in the sense that when</p> <p>5 you take a patient history for someone who</p> <p>6 presents with the disease and you find out the</p> <p>7 checkoff boxes on a history form, in terms of</p> <p>8 what their under a doctor's care for,</p> <p>9 hypertension is frequently found.</p> <p>10 Whether it's the fact that at a time</p> <p>11 when they actually developed the insult to their</p> <p>12 optic nerve that they actually happened to have</p> <p>13 elevated blood pressure at that time or it's the</p> <p>14 treatment of their blood pressure that causes the</p> <p>15 blood pressure to fall, I don't have the answer</p> <p>16 to that. Simply part of the medical history you</p> <p>17 identify in the patients when you examine them.</p> <p>18 Q. And part of the reason you don't</p> <p>19 have the answer to that in part is because we</p> <p>20 don't know the mechanism of the disease?</p> <p>21 A. Well, it's controversial. And</p> <p>22 second, even if I measured the blood pressure of</p> <p>23 a patient in my office, it isn't at all a</p> <p>24 reflection of what might be going on at the time</p> <p>25 that the vision loss occurred.</p>	<p>133</p> <p>1 Howard Pomeranz</p> <p>2 doctor's care for, hypertension shows up very</p> <p>3 frequently in these patients.</p> <p>4 Q. Is high cholesterol a risk factor</p> <p>5 for NAION?</p> <p>6 A. Again, like hypertension, has been a</p> <p>7 common concomitant medical condition that</p> <p>8 patients have who present with this.</p> <p>9 Q. Is diabetes a risk factor for NAION?</p> <p>10 A. Similar to the other two that I</p> <p>11 mentioned.</p> <p>12 Q. Ischemic heart disease a risk factor</p> <p>13 for NAION?</p> <p>14 A. Yes, I think all these things have</p> <p>15 been mentioned by various studies that have</p> <p>16 looked at risk factors for various patients.</p> <p>17 Q. Do you know whether high blood</p> <p>18 pressure is a risk factor for erectile</p> <p>19 dysfunction?</p> <p>20 A. I believe it is.</p> <p>21 Q. And is high cholesterol a risk</p> <p>22 factor for erectile dysfunction?</p> <p>23 A. It most likely is.</p> <p>24 Q. Is diabetes a risk factor for</p> <p>25 erectile dysfunction?</p>

34 (Pages 130 to 133)

<p>1 Howard Pomeranz</p> <p>2 A. That I definitely believe it is.</p> <p>3 Q. Is ischemic heart disease a risk</p> <p>4 factor for erectile dysfunction?</p> <p>5 A. Most likely is.</p> <p>6 Q. Is erectile dysfunction a risk</p> <p>7 factor for NAION?</p> <p>8 A. Is erectile dysfunction a risk</p> <p>9 factor for NAION? Not that I'm aware of.</p> <p>10 Q. They have overlapping risk factors?</p> <p>11 A. Yes, I think that's fair to say.</p> <p>12 MS. LESKIN: When did we start?</p> <p>13 JUDGE BORG: 10:14. You're about an</p> <p>14 hour plus out. You want to take another</p> <p>15 break here and then we can go into that</p> <p>16 12:30 time frame?</p> <p>17 MS. LESKIN: That would be great.</p> <p>18 THE VIDEOGRAPHER: Sure. We're off</p> <p>19 the record. The time is 11:22. This is</p> <p>20 the end of Tape 2.</p> <p>21 (Recess from the record.)</p> <p>22 THE VIDEOGRAPHER: Back on the</p> <p>23 record. The time is 11:55. This is the</p> <p>24 beginning of Tape 3.</p> <p>25 BY MS. LESKIN:</p>	<p>1 Howard Pomeranz</p> <p>2 MR. BECNEL: No problem.</p> <p>3 Q. Before the break, we were talking</p> <p>4 about -- earlier before the break, we were</p> <p>5 talking about blood flow studies and the effect</p> <p>6 of sildenafil on ocular blood flow. And I asked</p> <p>7 you whether you were aware of any studies that</p> <p>8 showed a decrease in blood flow to any of the</p> <p>9 ocular vessels following the use of Viagra.</p> <p>10 And you told me that you couldn't</p> <p>11 think of any, but you wanted the opportunity to</p> <p>12 look at the box of documents you brought with</p> <p>13 you.</p> <p>14 Have you now had the opportunity to</p> <p>15 review that box of documents?</p> <p>16 A. Yes.</p> <p>17 Q. Have you been able to locate any</p> <p>18 documents, any studies discussing or showing --</p> <p>19 strike that.</p> <p>20 Have you been able to locate any</p> <p>21 studies demonstrating a drop in blood pressure to</p> <p>22 the ocular vessels following the use of Viagra?</p> <p>23 A. Well, I haven't been able to really</p> <p>24 read them in detail during the break, but there</p> <p>25 are a variety of articles that say a variety of</p>
<p>1 Howard Pomeranz</p> <p>2 Q. Dr. Pomeranz, I just want to go back</p> <p>3 and cover a couple of things real quick.</p> <p>4 We marked as Exhibits 28 and 29 -- a</p> <p>5 copy of stipulated protective order in effect in</p> <p>6 this litigation as 28. And 29 is Exhibit A to</p> <p>7 that order, acknowledgment and agreement to be</p> <p>8 bound.</p> <p>9 (Pomeranz 28, Stipulated Protective</p> <p>10 Order, marked for identification.)</p> <p>11 (Pomeranz 29, Exhibit A to</p> <p>12 Protective Order, marked for</p> <p>13 identification.)</p> <p>14 Q. Have you ever seen Exhibit No. 28</p> <p>15 before?</p> <p>16 A. No.</p> <p>17 Q. And I take it that no one has ever</p> <p>18 asked you to read or sign what's marked as</p> <p>19 Exhibit 29?</p> <p>20 A. That's correct.</p> <p>21 Q. Would you have an objection to</p> <p>22 signing a document such as Number 29?</p> <p>23 A. No.</p> <p>24 Q. Maybe during the next break we can</p> <p>25 ask you to sign that so we have that in effect.</p>	<p>1 Howard Pomeranz</p> <p>2 different things about what the effect of</p> <p>3 sildenafil could be. So --</p> <p>4 Q. Is this pile of documents the ones</p> <p>5 that you pulled out?</p> <p>6 A. Yes.</p> <p>7 There are also papers that also</p> <p>8 dispute or raise the issue of how accurate some</p> <p>9 of the different studies are, and I certainly</p> <p>10 don't claim to be an expert in that at all. And</p> <p>11 as with any other clinician, I try to read the</p> <p>12 literature as I see it and make a judgment.</p> <p>13 Q. Okay. So let's go through these.</p> <p>14 First document you gave me looks</p> <p>15 like some excerpts from the Joint Clinical Review</p> <p>16 identified on the bottom. It says, "Joint</p> <p>17 Clinical Review. We have pages 96, 97, 98, Roman</p> <p>18 numeral VIII, page 160 and 161.</p> <p>19 Do you know what the Joint Clinical</p> <p>20 Review is?</p> <p>21 A. No. Those were the documents I was</p> <p>22 referring to, some of which I pulled out of</p> <p>23 Pfizer's website when I was initially looking</p> <p>24 into this issue. So I just provided that because</p> <p>25 you asked me what I had looked at.</p>

<p>138</p> <p>1 Howard Pomeranz</p> <p>2 Q. Okay. Can you show me where in this</p> <p>3 document it discusses ocular blood flow?</p> <p>4 A. I didn't say that this document did.</p> <p>5 I just pulled it out because you had asked me</p> <p>6 earlier what were some of the Pfizer studies that</p> <p>7 I had looked at. So I pulled it out so you could</p> <p>8 see what they were.</p> <p>9 Q. So this document entitled, "Joint</p> <p>10 Clinical Review" is not -- does not discuss</p> <p>11 ocular blood flow, as far as you know?</p> <p>12 A. I don't think so. I just pulled it</p> <p>13 out because you had asked me what things I had</p> <p>14 looked at from Pfizer's material as part of my</p> <p>15 review on the subject.</p> <p>16 Q. I'll tell you what, why don't I give</p> <p>17 you back this pile and you show me which of those</p> <p>18 studies discuss ocular blood flow.</p> <p>19 (Witness peruses documents.)</p> <p>20 A. These are ones I think that we</p> <p>21 talked about already (handing). And --</p> <p>22 Q. Just for the record, "these" refers</p> <p>23 to the Dundar paper, another copy of the Dundar</p> <p>24 paper, Paris, Pache, Kurtulan, Koksai, Grunwald</p> <p>25 2001 and Grunwald 2002; correct?</p>	<p>140</p> <p>1 Howard Pomeranz</p> <p>2 contribute to triggering sildenafil-induced</p> <p>3 migraine."</p> <p>4 Is there anything in this article</p> <p>5 that discusses ocular blood flow?</p> <p>6 A. No.</p> <p>7 Q. Then you have an article from</p> <p>8 Dr. Thompson and colleagues in JAMA,</p> <p>9 December 2005, "Erectile Dysfunction and</p> <p>10 Subsequent Cardiovascular Disease."</p> <p>11 It says, "Conclusions: Erectile</p> <p>12 dysfunction is a harbinger of cardiovascular</p> <p>13 clinical events in some men. Erectile</p> <p>14 dysfunction should prompt investigation and</p> <p>15 intervention for cardiovascular risk factors."</p> <p>16 Now, that talks a little bit about</p> <p>17 what we discussed earlier about the overlapping</p> <p>18 risk factors between NAION and ED; right?</p> <p>19 A. Right.</p> <p>20 Q. Is there any discussion in this</p> <p>21 article about ocular blood flow?</p> <p>22 A. I don't think so.</p> <p>23 Q. Then we have another copy of the</p> <p>24 Diomedi article and a commentary by Karen</p> <p>25 Johnson -- Johnston from the same publication.</p>
<p>139</p> <p>1 Howard Pomeranz</p> <p>2 A. Yes.</p> <p>3 Q. And those are documents that we --</p> <p>4 that we discussed already earlier, before the</p> <p>5 break?</p> <p>6 A. Right.</p> <p>7 Q. The rest of these documents -- wait.</p> <p>8 This looks like an excerpt of Dundar. That's</p> <p>9 another one we talked about before the break</p> <p>10 (handing).</p> <p>11 And the top one here is an article</p> <p>12 entitled, "Sildenafil Increases Cerebral Vascular</p> <p>13 Reactivity, A Transcranial Doppler Study," by</p> <p>14 Diomedi, D-I-O-M-E-D-I, published in 2005,</p> <p>15 Neurology.</p> <p>16 And the abstract says, "The authors</p> <p>17 performed a double-blind, placebo-controlled</p> <p>18 study in 28 patients to evaluate the effects of</p> <p>19 sildenafil on cerebral hemodynamics. A</p> <p>20 significant improvement of cerebrovascular</p> <p>21 reactivity without any modification of other</p> <p>22 variables was recorded one hour after the</p> <p>23 administration of 50 milligrams sildenafil.</p> <p>24 Further investigations are needed to evaluate</p> <p>25 whether cerebrovascular reactivity improvement</p>	<p>141</p> <p>1 Howard Pomeranz</p> <p>2 Does this at all discuss ocular</p> <p>3 blood flow?</p> <p>4 A. This talks about the brain.</p> <p>5 Q. Okay. An article by Dr. Hayreh,</p> <p>6 "Posterior Ciliary Artery Circulation in Health</p> <p>7 and Disease: The Weisenfeld Lecture,"</p> <p>8 Investigative Ophthalmology and Visual Science of</p> <p>9 March 2004.</p> <p>10 Does this discuss ocular blood flow</p> <p>11 following use of Viagra?</p> <p>12 A. Not following Viagra, but it talks</p> <p>13 about cerebral blood flow in general and ways of</p> <p>14 measuring it and -- but may be accurate or not</p> <p>15 accurate about various measures.</p> <p>16 Q. And there's an article, "The Blood</p> <p>17 Supply of the Optic Nerve Head and the Evaluation</p> <p>18 of It: Myth and Reality," by Dr. Hayreh,</p> <p>19 Progress in Retinal and Eye Research, 2001.</p> <p>20 Does this discuss ocular blood flow</p> <p>21 following use of Viagra?</p> <p>22 A. No, but again, it comments on</p> <p>23 various ways of measuring ocular blood flow and</p> <p>24 what their limitations or not might be.</p> <p>25 Q. Then there's an article by --</p>

36 (Pages 138 to 141)

<p style="text-align: right;">142</p> <p>1 Howard Pomeranz</p> <p>2 another article by Dr. Hayreh, "The 1994</p> <p>3 von Sallmann Lecture: The Optic Nerve Head</p> <p>4 Circulation in Health and Disease." It doesn't</p> <p>5 say which publication it was published in, but</p> <p>6 1995.</p> <p>7 Does this article discuss ocular</p> <p>8 blood flow following use of Viagra?</p> <p>9 A. No. This is I believe from -- may</p> <p>10 be from a textbook.</p> <p>11 Q. It does not discuss blood flow</p> <p>12 following use of Viagra?</p> <p>13 A. No.</p> <p>14 Q. It looks to me the last article is,</p> <p>15 "Blood Flow in the Optic Nerve Head and Factors</p> <p>16 That May Influence It," again by Dr. Hayreh, in</p> <p>17 Progress in Retinal and Eye Research, 2001.</p> <p>18 Does this article discuss blood</p> <p>19 flow, ocular blood flow following use of Viagra?</p> <p>20 A. No.</p> <p>21 Q. Next you give me a case report by</p> <p>22 Dr. Allivhai, A-L-L-I-V-H-A-I, "Central Serous</p> <p>23 Chorial Retinopathy in a Patient Taking</p> <p>24 Sildenafil Citrate," published in Ophthalmic</p> <p>25 Surgery Lasers and Imaging, in March/April 2004.</p>	<p style="text-align: right;">144</p> <p>1 Howard Pomeranz</p> <p>2 Q. Was it measuring blood flow in the</p> <p>3 choroid?</p> <p>4 A. They were measuring choroidal</p> <p>5 thickness.</p> <p>6 Q. Is that blood flow in the choroid?</p> <p>7 A. The choroid is largely made up of</p> <p>8 blood.</p> <p>9 Q. Is that study purporting to measure</p> <p>10 blood flow in the choroid?</p> <p>11 A. No, it's measuring thickness of the</p> <p>12 choroid.</p> <p>13 Q. And then you've given me Dr. Paris</p> <p>14 and Dr. Sponsel, which again we spoke about</p> <p>15 earlier?</p> <p>16 A. Uh-huh.</p> <p>17 Q. Are there any other studies that</p> <p>18 you've reviewed discussing the measurement of</p> <p>19 blood flow following -- to the ocular vessels</p> <p>20 following use of Viagra?</p> <p>21 A. I think I brought everything with me</p> <p>22 that I have.</p> <p>23 Q. Have you found any studies showing a</p> <p>24 decrease in blood flow following Viagra use?</p> <p>25 A. If I did, they're not here with me</p>
<p style="text-align: right;">143</p> <p>1 Howard Pomeranz</p> <p>2 Does Dr. Allivhai discuss ocular</p> <p>3 blood flow or the measurement of ocular blood</p> <p>4 flow following use of Viagra?</p> <p>5 A. I don't think they measured blood</p> <p>6 flow, but they talked about implications that the</p> <p>7 drug might have on blood flow in the choroid in</p> <p>8 the eye.</p> <p>9 Q. But they didn't measure blood flow?</p> <p>10 A. No, this was a clinical case</p> <p>11 description.</p> <p>12 Q. Next you've given me an article by</p> <p>13 Dr. Cully and colleagues in Ophthalmologica,</p> <p>14 2002, "Effects of Sildenafil Citrate (Viagra) on</p> <p>15 Choroidal Congestion."</p> <p>16 And they conclude, based on the</p> <p>17 abstract, "An oral dose of 200 milligrams of</p> <p>18 sildenafil caused small inconsistent changes in</p> <p>19 choroidal thickness which did not correlate with</p> <p>20 visual effects"; right?</p> <p>21 A. That's what it says.</p> <p>22 Q. Does that article measure blood flow</p> <p>23 to the optic nerve?</p> <p>24 A. No, they were measuring in the</p> <p>25 choroid.</p>	<p style="text-align: right;">145</p> <p>1 Howard Pomeranz</p> <p>2 today. So there are none others that I can</p> <p>3 produce for you. The answer is probably no, but,</p> <p>4 you know, the best that I can tell you at this</p> <p>5 point.</p> <p>6 Q. We're here to take your deposition</p> <p>7 prior to briefing on some motions, and so we need</p> <p>8 to know everything you've relied on at this point</p> <p>9 in time.</p> <p>10 So as of this point in time, are you</p> <p>11 aware of any studies that shows a decrease in</p> <p>12 ocular blood flow following use of Viagra?</p> <p>13 A. To the optic nerve, to all the</p> <p>14 vessels to the choroid, to the best of my</p> <p>15 recollection, no, unless there's something else</p> <p>16 in here that I'm just, you know, not aware of at</p> <p>17 this point.</p> <p>18 Q. You've had the opportunity to review</p> <p>19 your box. We've gone through the articles you</p> <p>20 pulled out. Do any of those studies demonstrate</p> <p>21 a decrease in blood flow to the optic vessels</p> <p>22 following use of Viagra?</p> <p>23 A. Not that we reviewed.</p> <p>24 Q. Are you aware of any other studies</p> <p>25 that show a decrease in blood flow to the optic</p>

<p>1 Howard Pomeranz</p> <p>2 vessels following use of Viagra?</p> <p>3 A. Not at this time.</p> <p>4 Q. You mentioned earlier a patient who</p> <p>5 had edema prior to the loss of any visual field</p> <p>6 in NAION. Do you have any data which identifies</p> <p>7 the percentage of patients with NAION in which</p> <p>8 that occurs?</p> <p>9 A. Not in my own patient population.</p> <p>10 Q. Are you aware of any data that is</p> <p>11 published by others that shows the incident rate</p> <p>12 at which patients with NAION present with edema</p> <p>13 prior to the onset of any visual field loss?</p> <p>14 A. Hayreh may be -- I think Hayreh has</p> <p>15 done that, but I'm not aware of anybody else.</p> <p>16 Q. So whatever is out there is what</p> <p>17 Dr. Hayreh has published?</p> <p>18 A. As far as I'm aware.</p> <p>19 Q. So if -- strike that.</p> <p>20 Now, you know -- and we've kind of</p> <p>21 been using them interchangeable, but Viagra's</p> <p>22 chemical name is sildenafil; right?</p> <p>23 A. Correct.</p> <p>24 Q. And it's sold for erectile</p> <p>25 dysfunction as Viagra; right?</p>	<p>146</p> <p>1 Howard Pomeranz</p> <p>2 represent to you is the FDA's review of the</p> <p>3 scientific application that Pfizer presented to</p> <p>4 the FDA. Have you read anything else regarding</p> <p>5 any of the studies on Viagra?</p> <p>6 A. From Pfizer, you mean?</p> <p>7 Q. Yes.</p> <p>8 A. Only to the extent to what I</p> <p>9 remembered that was on the CD of documents that</p> <p>10 was given to me that I had a brief chance to</p> <p>11 review.</p> <p>12 Q. And what documents do you recall</p> <p>13 from that CD?</p> <p>14 A. Well, I recall some documents where,</p> <p>15 at some of the meetings, they had they discussed</p> <p>16 whether certain things should be reported or not</p> <p>17 or in what way.</p> <p>18 Q. Anything else?</p> <p>19 A. That's relevant to what you asked</p> <p>20 me, I don't think so.</p> <p>21 Q. Do any of the documents that you</p> <p>22 reviewed affect your opinion on causation in this</p> <p>23 case, the internal Pfizer documents?</p> <p>24 A. No.</p> <p>25 Q. What is your understanding of the</p>
<p>1 Howard Pomeranz</p> <p>2 A. Yes.</p> <p>3 Q. And as you mentioned earlier, it's</p> <p>4 sold to treat pulmonary hypertension as Revatio;</p> <p>5 correct?</p> <p>6 A. Correct.</p> <p>7 Q. Sildenafil is one of a class of</p> <p>8 drugs known as PDE5 inhibitors; correct?</p> <p>9 A. Yes.</p> <p>10 Q. You know there are other drugs out</p> <p>11 there that are PDE5 inhibitors, including</p> <p>12 tadalafil or vardenafil; right?</p> <p>13 A. Correct.</p> <p>14 Q. Do you know the differences in</p> <p>15 chemical composition between sildenafil,</p> <p>16 tadalafil and vardenafil?</p> <p>17 A. Not the details of them, no.</p> <p>18 Q. Do you know any of the differences</p> <p>19 in the pharmacology of those drugs?</p> <p>20 A. To the extent of how long they're</p> <p>21 supposed to remain in the body, I believe Cialis</p> <p>22 is supposed to last for a longer period of time;</p> <p>23 but beyond that, no.</p> <p>24 Q. You had some papers in that pile</p> <p>25 from the Joint Clinical Review, which I'll</p>	<p>147</p> <p>1 Howard Pomeranz</p> <p>2 mechanism by which Viagra works for its intended</p> <p>3 purposes?</p> <p>4 A. Well, it inhibits an enzyme that's</p> <p>5 involved in dilation of blood vessels in the</p> <p>6 penis and allows that dilation to remain</p> <p>7 established for a longer period of time.</p> <p>8 Q. What is your understanding of the</p> <p>9 impact of sildenafil on nitric oxide levels?</p> <p>10 A. Well, I know that both are involved.</p> <p>11 There are various pathways involved in inducing</p> <p>12 constriction or dilation of blood vessels in the</p> <p>13 body and that nitric oxide is involved in that</p> <p>14 process. Again, I don't purport myself to be an</p> <p>15 expert in that area. I just read the literature</p> <p>16 to the best of my ability to understand it the</p> <p>17 best I can.</p> <p>18 Q. Do you have an opinion as to whether</p> <p>19 Viagra affects the levels of nitric oxide?</p> <p>20 A. No, I don't think I've purported an</p> <p>21 opinion regarding that, other than the fact that</p> <p>22 it may do something to alter the body's control</p> <p>23 or the regulation of those such things, but I</p> <p>24 don't think I put forth any specific mechanism.</p> <p>25 Q. Do you believe that Viagra has an</p>
<p>38 (Pages 146 to 149)</p>	<p>148</p> <p>149</p>

<p style="text-align: right;">150</p> <p>1 Howard Pomeranz</p> <p>2 effect on the levels of nitric oxide?</p> <p>3 A. I can't say that I know enough about</p> <p>4 the details of those things to tell you that I</p> <p>5 have an opinion about it. I think either that</p> <p>6 research is ongoing or remains to be seen.</p> <p>7 Q. Are you aware of any studies showing</p> <p>8 Viagra causes vasoconstriction of any vessels in</p> <p>9 the body?</p> <p>10 A. I think there are papers that I've</p> <p>11 read that have had conflicting results in terms</p> <p>12 of effects of Viagra on blood vessels in the eye.</p> <p>13 But as a clinician, I really don't have the means</p> <p>14 to critically judge a lot of these papers.</p> <p>15 And so sometimes it's hard to put</p> <p>16 papers side by side because of different patient</p> <p>17 populations in which the studies have been done,</p> <p>18 length of time that they've been studied, whether</p> <p>19 there's a patient population that had coincident</p> <p>20 risk factors. Things like that make it hard to</p> <p>21 put a lot of these studies side by side and</p> <p>22 directly compare one to another.</p> <p>23 So as any other clinician does in a</p> <p>24 similar situation, you try to get a gist of what</p> <p>25 the literature is like and try to draw</p>	<p style="text-align: right;">152</p> <p>1 Howard Pomeranz</p> <p>2 the half-life of sildenafil is?</p> <p>3 A. Inasmuch as I learned about that as</p> <p>4 a medical student, yes.</p> <p>5 Q. What's the half-life of Viagra?</p> <p>6 A. The time that it takes for half of</p> <p>7 the medication to disappear from the body.</p> <p>8 Q. What is that period of time for</p> <p>9 sildenafil?</p> <p>10 A. If I recall, it's something in the</p> <p>11 manner of hours.</p> <p>12 Q. For how long is a patient under a</p> <p>13 pharmacological effect of sildenafil after taking</p> <p>14 the drug?</p> <p>15 A. I guess for as long as the body --</p> <p>16 the drug in total is present in the body.</p> <p>17 Q. Do you have an understanding of how</p> <p>18 long that is?</p> <p>19 A. I think it could be as long as a</p> <p>20 day.</p> <p>21 Q. Twenty-four hours?</p> <p>22 A. Yes.</p> <p>23 Q. Is it your hypothesis that Viagra</p> <p>24 can cause NAION?</p> <p>25 A. No. At this time, I described in my</p>
<p style="text-align: right;">151</p> <p>1 Howard Pomeranz</p> <p>2 conclusions.</p> <p>3 Q. Which studies show that Viagra</p> <p>4 causes vasoconstriction in the vessels in the</p> <p>5 eye?</p> <p>6 A. I don't know if they talked about</p> <p>7 specific -- I can't really recall off the top of</p> <p>8 my head.</p> <p>9 Q. Well, you have the ones we went</p> <p>10 through here today in front of you. You're</p> <p>11 welcome to take a look and see if any of those</p> <p>12 talk about vasoconstriction. You say that there</p> <p>13 are papers that have conflicting results about</p> <p>14 the effects of Viagra on blood vessels in the</p> <p>15 eye.</p> <p>16 My question is --</p> <p>17 A. Right. It doesn't necessarily mean</p> <p>18 constriction or dilation. It may have to do with</p> <p>19 blood flow through blood vessels as well.</p> <p>20 Q. Let's go back to my question.</p> <p>21 Are you aware of any papers or any</p> <p>22 studies that show that Viagra causes</p> <p>23 vasoconstriction of any blood vessel in the body?</p> <p>24 A. Not that I'm aware of.</p> <p>25 Q. Do you have an understanding of what</p>	<p style="text-align: right;">153</p> <p>1 Howard Pomeranz</p> <p>2 papers that there's a temporal association</p> <p>3 between the two. And I've put forth possible</p> <p>4 hypotheses, but I don't purport to have a</p> <p>5 mechanistic answer to that.</p> <p>6 I think it's -- because no one</p> <p>7 understands completely what the mechanism of</p> <p>8 NAION is, to incite something as being a specific</p> <p>9 cause without necessarily knowing all the</p> <p>10 pathophysiology that underlies a condition I</p> <p>11 think is difficult to do.</p> <p>12 Q. Are you aware of any studies that</p> <p>13 show an increased rate of NAION in patients</p> <p>14 taking Viagra as compared to patients not taking</p> <p>15 Viagra?</p> <p>16 A. I think there are epidemiological</p> <p>17 studies that have been carried out, as imperfect</p> <p>18 as they are, that have tried to look at that.</p> <p>19 And unfortunately, I think when you have an event</p> <p>20 that is as uncommon as NAION, it's very difficult</p> <p>21 to do those kinds of studies.</p> <p>22 Retrospective studies are always</p> <p>23 different. And the best way to try to do those</p> <p>24 is on a prospective basis. And given the rarity</p> <p>25 of this kind of condition, you'd have to carry</p>

<p>1 Howard Pomeranz</p> <p>2 out those studies for long periods of time before</p> <p>3 getting some kind of definitive results.</p> <p>4 Q. So the epi studies that have been</p> <p>5 done do not demonstrate an increased rate of</p> <p>6 NAION in patients taking Viagra?</p> <p>7 A. I think it shows some minimal</p> <p>8 increase. I think using the epidemiological</p> <p>9 numbers that they come up with, which I don't</p> <p>10 pretend to be intimately familiar with, I'm not</p> <p>11 an epidemiologist, they suggest a trend towards</p> <p>12 increase. But I don't think anything has been</p> <p>13 definitively proven or disproven.</p> <p>14 Q. Are you aware of any clinical</p> <p>15 studies that compare a group of patients taking</p> <p>16 Viagra with a group of patient taking placebo</p> <p>17 that show a higher rate of NAION in patients</p> <p>18 taking Viagra?</p> <p>19 A. No, I'm not aware of that. I think</p> <p>20 doing that kind of study would be fraught with</p> <p>21 all kinds of ethical problems, to take a group of</p> <p>22 patients and say, Here's a drug that potentially</p> <p>23 could cause you to have some permanent vision</p> <p>24 loss and let's see if you develop them, compared</p> <p>25 to a group that's not taking them. I think it</p>	<p>154</p> <p>1 Howard Pomeranz</p> <p>2 how Viagra can possibly cause NAION, those are</p> <p>3 all hypothetical at best; right?</p> <p>4 A. Yes, I think they're hypotheses. I</p> <p>5 don't think they've been proven or disproven, at</p> <p>6 least in my opinion.</p> <p>7 Q. And the role sildenafil may play in</p> <p>8 causing injury to the optic nerve is not known;</p> <p>9 right?</p> <p>10 A. You mean the mechanism by which it</p> <p>11 might do that? Is that what you're asking me?</p> <p>12 Q. I'm asking you about the role that</p> <p>13 sildenafil may play in causing injury.</p> <p>14 A. Well, I think -- yes, I think there</p> <p>15 are definite opinions about that, about whether</p> <p>16 it may be a concomitant risk factor with the</p> <p>17 other medical risk factors that we talked about</p> <p>18 already.</p> <p>19 (Pomeranz 30, Article by Howard</p> <p>20 Pomeranz and colleagues entitled,</p> <p>21 "Sildenafil-Associated Nonarteritic</p> <p>22 Anterior Ischemic Optic Neuropathy,"</p> <p>23 published in the Journal of Ophthalmology</p> <p>24 in 2002, marked for identification.)</p> <p>25 MS. LESKIN: We've marked as</p>
<p>155</p> <p>1 Howard Pomeranz</p> <p>2 would be unethical to set up any kind of study</p> <p>3 like that.</p> <p>4 Q. Have you -- you talked about this</p> <p>5 briefly. Have you looked at any of the results</p> <p>6 of the clinical trials that Pfizer did during the</p> <p>7 development of Viagra?</p> <p>8 A. Only the ones I showed you.</p> <p>9 Q. And do any of those discuss any</p> <p>10 events of NAION, as far as you can tell?</p> <p>11 A. My only recollection is looking</p> <p>12 through the documents that were -- some of the</p> <p>13 confidential documents from Pfizer, I think they</p> <p>14 attempted to try to do that and look at various</p> <p>15 clinical studies. And my recollection is that I</p> <p>16 think they found maybe one or two cases or</p> <p>17 something like that, but that's --</p> <p>18 Q. What's that based on, that</p> <p>19 recollection?</p> <p>20 A. The documents that were in the CD of</p> <p>21 documents that were deposited from Pfizer, I</p> <p>22 believe, where some of those studies were</p> <p>23 discussed.</p> <p>24 Q. Now, I think you mentioned this.</p> <p>25 The proposed mechanisms that are out there as to</p>	<p>157</p> <p>1 Howard Pomeranz</p> <p>2 Exhibit 30 an article by Howard Pomeranz</p> <p>3 and colleagues entitled,</p> <p>4 "Sildenafil-Associated Nonarteritic</p> <p>5 Anterior Ischemic Optic Neuropathy,"</p> <p>6 published in the Journal of Ophthalmology</p> <p>7 in 2002.</p> <p>8 Q. This is again one of your articles;</p> <p>9 correct?</p> <p>10 A. Yes.</p> <p>11 Q. And this is your first case series;</p> <p>12 right?</p> <p>13 A. That's right.</p> <p>14 Q. And looking on page 386, on the</p> <p>15 right column, the top line there, you wrote, "The</p> <p>16 role sildenafil may play in causing injury to the</p> <p>17 optic nerve is not known."</p> <p>18 Right?</p> <p>19 A. Right.</p> <p>20 Q. And going back to your editorial,</p> <p>21 which we marked earlier as Exhibit 12, the one</p> <p>22 you wrote with Dr. Fraunfelder, you wrote there,</p> <p>23 "A well-researched explanation as to how</p> <p>24 sildenafil therapy could cause NAION does not</p> <p>25 exist."</p>

<p>158</p> <p>1 Howard Pomeranz</p> <p>2 Right?</p> <p>3 A. Correct, because we don't understand</p> <p>4 the exact mechanism by which NAION works. So to</p> <p>5 purport that we have that for a drug in a</p> <p>6 black-box situation to the optic nerve is saying</p> <p>7 almost the same thing.</p> <p>8 Q. And you also wrote there "Until an</p> <p>9 animal model or scientific study reveals a</p> <p>10 biological basis for NAION caused by treatment</p> <p>11 with sildenafil, most of the case reports of</p> <p>12 NAION related to this drug may be an expected</p> <p>13 coincidence, as sildenafil is a top-selling</p> <p>14 medication and patients who receive this drug are</p> <p>15 frequently older, vasculopathic and already at</p> <p>16 risk for NAION."</p> <p>17 Right?</p> <p>18 A. Well, that was more of an opinion I</p> <p>19 think of Dr. Fraunfelder than me. Sometimes when</p> <p>20 you write a paper and you collaborate together,</p> <p>21 you come up with the best you can and you</p> <p>22 compromise.</p> <p>23 But I think if you look at an e-mail</p> <p>24 that Dr. Fraunfelder sent to me, he kind of</p> <p>25 behind the paper said that there may be more of a</p>	<p>160</p> <p>1 Howard Pomeranz</p> <p>2 A. Correct.</p> <p>3 Q. You didn't believe it was probable,</p> <p>4 you believed it was possible; right?</p> <p>5 A. The opinion of the three authors</p> <p>6 together here is that it's possible. The thing</p> <p>7 that convinces me of more than just a possible</p> <p>8 association is the temporal association between</p> <p>9 taking the drug and the onset of vision loss.</p> <p>10 Q. In May 2006, you put your name on an</p> <p>11 editorial that was published in the Archives of</p> <p>12 Ophthalmology that said the association is</p> <p>13 possible; right?</p> <p>14 A. Yes.</p> <p>15 Q. And you put your name on an</p> <p>16 editorial that appeared in the Archives of</p> <p>17 Ophthalmology on a paper that said that the case</p> <p>18 reports of -- most of the case reports of NAION</p> <p>19 related to this drug may be an expected</p> <p>20 coincidence --</p> <p>21 A. Yes.</p> <p>22 Q. -- right?</p> <p>23 Your name's on this editorial;</p> <p>24 correct?</p> <p>25 A. Yes.</p>
<p>159</p> <p>1 Howard Pomeranz</p> <p>2 possible association rather than the not for</p> <p>3 this. So I think that statement is taken with a</p> <p>4 grain of salt.</p> <p>5 Q. Well, in fact, you wrote here on the</p> <p>6 left column, "From this data, the association</p> <p>7 between sildenafil and NAION is possible,</p> <p>8 according to World Health Organization criteria</p> <p>9 that require that a clinical event occurs within</p> <p>10 a reasonable time from drug administration."</p> <p>11 A. Right.</p> <p>12 Q. And that's what you wrote in the</p> <p>13 paper; right?</p> <p>14 A. Correct.</p> <p>15 Q. You wrote, "However, this</p> <p>16 classification also allows that a concurrent</p> <p>17 disease or the ingestion of other drugs or</p> <p>18 chemicals can cause NAION."</p> <p>19 Right?</p> <p>20 A. That's what it says.</p> <p>21 Q. And that's what "possible" means;</p> <p>22 right?</p> <p>23 A. Possible.</p> <p>24 Q. And a different classification under</p> <p>25 WHO criteria is probable; right?</p>	<p>161</p> <p>1 Howard Pomeranz</p> <p>2 Q. Did you ever write a subsequent</p> <p>3 letter to the Archives of Ophthalmology that</p> <p>4 said, Gee, I don't agree with Dr. Fraunfelder and</p> <p>5 Egan, I think it's more than that?</p> <p>6 A. Not in response to this</p> <p>7 specifically, but I've written other articles</p> <p>8 elsewhere that expresses my individual opinion on</p> <p>9 the matter.</p> <p>10 Q. Going back to your presentation you</p> <p>11 gave to your scientific colleagues that we marked</p> <p>12 previously as Exhibit 13. This is a presentation</p> <p>13 we spoke about earlier. And you gave this to</p> <p>14 your -- other scientists and medical doctors;</p> <p>15 correct?</p> <p>16 A. No, this was to ophthalmologists at</p> <p>17 the Academy of Ophthalmology.</p> <p>18 Q. Are ophthalmologists medical</p> <p>19 doctors?</p> <p>20 A. Yes.</p> <p>21 Q. So this --</p> <p>22 A. Not necessarily scientists, but</p> <p>23 ophthalmologists.</p> <p>24 Q. You don't consider yourself a</p> <p>25 scientist?</p>

<p style="text-align: right;">162</p> <p>1 Howard Pomeranz</p> <p>2 A. I wouldn't say all ophthalmologists</p> <p>3 are scientists per se. They're physicians. If</p> <p>4 you mean a Ph.D. versus an M.D. --</p> <p>5 Q. This is a presentation you gave to</p> <p>6 other ophthalmologists; correct?</p> <p>7 A. That's right.</p> <p>8 Q. If you look at the last page of that</p> <p>9 presentation, you wrote, "Unclear, controversial</p> <p>10 erectile dysfunction drugs."</p> <p>11 A. That's right. I think that's</p> <p>12 entirely consistent with the statement that you</p> <p>13 were bringing up before about possible versus</p> <p>14 probable versus not and if we don't know the</p> <p>15 answer for sure. That's why I think it's unclear</p> <p>16 or controversial.</p> <p>17 Q. In your report, you discuss the weak</p> <p>18 inhibitory activity that sildenafil has against</p> <p>19 PDE6; right?</p> <p>20 A. Yes.</p> <p>21 Q. Does PDE6 have anything to do with</p> <p>22 NAION?</p> <p>23 A. Not that I'm aware of. I believe</p> <p>24 it's just an effect on retinal cells.</p> <p>25 Q. And the blue-green light effect</p>	<p style="text-align: right;">164</p> <p>1 Howard Pomeranz</p> <p>2 do those -- have those patients reported seeing a</p> <p>3 blue flash or lightning or blue effect prior to</p> <p>4 visual loss in NAION?</p> <p>5 A. Well, patients describe disturbances</p> <p>6 in their vision sometimes before the onset of</p> <p>7 what turns out to be permanent vision loss. Do I</p> <p>8 recall a patient who said specifically that he or</p> <p>9 she had blue or green color changes as opposed to</p> <p>10 other colors, I don't know. It's possible.</p> <p>11 Q. But sitting here today, do you</p> <p>12 recall any patient ever telling you or reading</p> <p>13 anywhere in the literature, absent use of Viagra,</p> <p>14 that they saw a blue color to their vision prior</p> <p>15 to the onset of NAION or visual loss?</p> <p>16 A. All that I can recall is that</p> <p>17 there's some patients who have described having</p> <p>18 disturbances in their vision that may affect</p> <p>19 their color vision. Whether they specifically</p> <p>20 said it was blue-green, I don't recall.</p> <p>21 Q. Are you aware of any studies</p> <p>22 demonstrating an increase of NAION following the</p> <p>23 use of antihypertensive medications?</p> <p>24 A. Can you ask that again?</p> <p>25 Q. Sure.</p>
<p style="text-align: right;">163</p> <p>1 Howard Pomeranz</p> <p>2 that's been reported in conjunction with</p> <p>3 sildenafil use, do you believe that's due to PDE6</p> <p>4 or PDE5 inhibition?</p> <p>5 A. Most likely PDE6.</p> <p>6 Q. So does the blue-green tinge to</p> <p>7 light effect that's been reported with Viagra</p> <p>8 have anything to do with NAION?</p> <p>9 A. Well, that color change has been</p> <p>10 associated with changes transitory that occur in</p> <p>11 the retina due to PDE6. There's some patients</p> <p>12 who describe, as we described before, we talked</p> <p>13 about earlier, visual disturbances that may occur</p> <p>14 prior to the onset of the permanent vision loss.</p> <p>15 And some of those patients describe color or</p> <p>16 other types of changes.</p> <p>17 So it would really be necessary in</p> <p>18 an individual patient to get detail about what</p> <p>19 they actually are perceiving before the onset of</p> <p>20 vision loss. In some cases, it might be the</p> <p>21 effect of PDE6 transiently on the retina; in</p> <p>22 other cases, it might be a premonitory symptom</p> <p>23 that might ultimately lead to ischemic optic</p> <p>24 neuropathy.</p> <p>25 Q. In patients who do not take Viagra,</p>	<p style="text-align: right;">165</p> <p>1 Howard Pomeranz</p> <p>2 Are you aware of any clinical</p> <p>3 studies that show an increase in the incidence of</p> <p>4 NAION in patients taking antihypertensive</p> <p>5 medications as compared to patients not taking</p> <p>6 antihypertensive medications?</p> <p>7 A. I know there have been studies that</p> <p>8 have looked at hypertension as a risk factor.</p> <p>9 I'm not sure they were studied specifically in</p> <p>10 the way that you've put your question. I think</p> <p>11 they were designed more to see if hypertension</p> <p>12 was a risk factor per se. So I'm not aware of a</p> <p>13 specific study phrased in the way that you asked</p> <p>14 the question.</p> <p>15 Q. Do you believe that nitrates cause</p> <p>16 NAION?</p> <p>17 A. Do nitrates cause NAION? Not that</p> <p>18 I'm aware of.</p> <p>19 Q. In your report, you make reference</p> <p>20 to cases of challenge/rechallenge involving PDE5</p> <p>21 inhibitors; correct?</p> <p>22 A. Yes.</p> <p>23 Q. Which of the case reports involving</p> <p>24 sildenafil that have been published do you</p> <p>25 believe represent a challenge/rechallenge case?</p>

<p style="text-align: right;">166</p> <p>1 Howard Pomeranz</p> <p>2 A. Well, certainly I believe the first</p> <p>3 case report that was described is, because the</p> <p>4 patient described taking the drug initially and</p> <p>5 then taking it again.</p> <p>6 Q. Any others?</p> <p>7 A. I think out of the other case</p> <p>8 reports, I don't recall that there were</p> <p>9 challenge/rechallenge data there except for the</p> <p>10 fact that one eye became affected in one patient</p> <p>11 and then subsequently the other eye with</p> <p>12 continued use of the drug.</p> <p>13 Q. So which other patient do you</p> <p>14 believe are a challenge/rechallenge case?</p> <p>15 A. I think one is in a sense because</p> <p>16 both eyes were involved.</p> <p>17 Q. One from which article?</p> <p>18 A. The 2005 review, Case No. 1 that's</p> <p>19 in the table.</p> <p>20 Q. Uh-huh. Present study, Number 1?</p> <p>21 A. Right.</p> <p>22 Q. Which other ones are</p> <p>23 challenge/rechallenge?</p> <p>24 A. Well, I have to go back through the</p> <p>25 histories and read them all over again to see if</p>	<p style="text-align: right;">168</p> <p>1 Howard Pomeranz</p> <p>2 (Witness peruses the exhibit.)</p> <p>3 A. It says in this affidavit that he</p> <p>4 was taking Zolof, Zocoletrol [ph] and aspirin.</p> <p>5 This one says the medications were just</p> <p>6 sertraline and omeprazole. So I'm not sure it's</p> <p>7 the same patient.</p> <p>8 Q. Okay. You read through the case</p> <p>9 report as you've described it in your article.</p> <p>10 You say first that "One day before presentation,</p> <p>11 he took one 25-milligram sildenafil tablet before</p> <p>12 intercourse, after not having used the medication</p> <p>13 for several months. A few hours later after</p> <p>14 intercourse, he saw bright colors followed by</p> <p>15 loss of vision in the right eye and soreness</p> <p>16 around the eye."</p> <p>17 Correct?</p> <p>18 A. That's what it says, yes.</p> <p>19 Q. And then on the right column, the</p> <p>20 bottom paragraph says, "A repeat sedimentation</p> <p>21 rate three months later was three. Four months</p> <p>22 after initial presentation, the patient noted</p> <p>23 progressive visual loss in the left eye."</p> <p>24 Correct?</p> <p>25 A. Yes.</p>
<p style="text-align: right;">167</p> <p>1 Howard Pomeranz</p> <p>2 there's description of the patient taking the</p> <p>3 drug first and losing vision temporarily and</p> <p>4 going back again. I have to look through them</p> <p>5 all again.</p> <p>6 Q. You have 1 through 7 there. And the</p> <p>7 first five, Exhibit 30 --</p> <p>8 A. Right. And Number -- well, the one</p> <p>9 that says, "Pomeranz, et al.," in the list there,</p> <p>10 the first one I believe -- the patient 52 years</p> <p>11 old, I think that's the same patient that was</p> <p>12 described in the initial case report in 2000.</p> <p>13 Q. Okay. Anyone else?</p> <p>14 (Witness peruses the exhibit.)</p> <p>15 A. No, out of these case series, would</p> <p>16 just be the two that I mentioned.</p> <p>17 Q. So let's take a look at Case No. 1</p> <p>18 in the case series you were just looking at.</p> <p>19 That's the 2005 article.</p> <p>20 Now, if you can pull out for me the</p> <p>21 affidavit you submitted in Mr. Grant's case.</p> <p>22 A. Okay.</p> <p>23 Q. Case No. 1 in the 2005 case series,</p> <p>24 that's Mr. Grant, isn't it?</p> <p>25 A. Let's see.</p>	<p style="text-align: right;">169</p> <p>1 Howard Pomeranz</p> <p>2 Q. Based on the information you</p> <p>3 provided here, did the patient take Viagra prior</p> <p>4 to noting this initial -- progressive visual loss</p> <p>5 in the left eye?</p> <p>6 (Witness peruses the exhibit.)</p> <p>7 A. Yes. If you look in the next</p> <p>8 paragraph there, it says at the top of the next</p> <p>9 page, "Three weeks later, the patient took</p> <p>10 another 25-milligram dose of sildenafil and</p> <p>11 subsequently engaged in sexual intercourse."</p> <p>12 Q. Okay. So is it your testimony then</p> <p>13 that the three weeks later, referring to the next</p> <p>14 dose of sildenafil, occurred before or after he</p> <p>15 noticed the progressive visual loss in the left</p> <p>16 eye?</p> <p>17 (Witness peruses the exhibit.)</p> <p>18 A. It looks like it was afterwards.</p> <p>19 Q. Let's go to your Exhibit 30, which</p> <p>20 is the first case series you talked about. It's</p> <p>21 your other case series. I don't know if you have</p> <p>22 it.</p> <p>23 A. I see. Okay.</p> <p>24 Q. And you identify Patient 1 as a</p> <p>25 challenge/rechallenge case; correct?</p>

<p style="text-align: right;">170</p> <p>1 Howard Pomeranz</p> <p>2 A. Yes.</p> <p>3 Q. In fact, I think you have a</p> <p>4 longer -- I'm going to give you -- we'll mark</p> <p>5 Exhibit 31, the initial publication.</p> <p>6 (Pomeranz 31, Letter to the Editor</p> <p>7 from Robert Egan and Howard Pomeranz</p> <p>8 published in the Archives of Ophthalmology</p> <p>9 in February of 2005, entitled, "Sildenafil</p> <p>10 (Viagra) Associated Anterior Ischemic Optic</p> <p>11 Neuropathy," marked for identification.)</p> <p>12 MS. LESKIN: Exhibit 31 is a letter</p> <p>13 to the editor from Robert Egan and Howard</p> <p>14 Pomeranz published in the Archives of</p> <p>15 Ophthalmology in February of 2005,</p> <p>16 entitled, "Sildenafil (Viagra) Associated</p> <p>17 Anterior Ischemic Optic Neuropathy."</p> <p>18 A. It's not a letter to the editor.</p> <p>19 It's a short report.</p> <p>20 Q. So the short report that's published</p> <p>21 here on Exhibit 31, that's the same as Patient</p> <p>22 No. 1 in your case series of 2002; correct?</p> <p>23 A. Correct.</p> <p>24 Q. So with a little bit more detail on</p> <p>25 Exhibit 31, a little bit longer, let's take a</p>	<p style="text-align: right;">172</p> <p>1 Howard Pomeranz</p> <p>2 some progression in visual field or drop in</p> <p>3 acuity that the patient may or may not have been</p> <p>4 aware of.</p> <p>5 Q. Can you say with any certainty that</p> <p>6 there was progression the next night in his</p> <p>7 visual loss?</p> <p>8 A. No. You can only demonstrate what</p> <p>9 was shown on exam when the patient was examined</p> <p>10 five days later.</p> <p>11 Q. And based on his history?</p> <p>12 A. Well, his vision was 20/20, so he</p> <p>13 certainly didn't lose any acuity. He could have</p> <p>14 lost more visual field.</p> <p>15 Q. Did he tell you he lost more visual</p> <p>16 field between the first night and the second</p> <p>17 night?</p> <p>18 A. It says he experienced a recurrence</p> <p>19 of the same symptoms.</p> <p>20 Q. It also says the blurry vision in</p> <p>21 the left eye did not change; right?</p> <p>22 A. Yes. But in this report, it says</p> <p>23 the blurry vision in the left eye persisted.</p> <p>24 Q. Does that mean it changed?</p> <p>25 A. Well, obviously his visual acuity on</p>
<p style="text-align: right;">171</p> <p>1 Howard Pomeranz</p> <p>2 look at your description here. "52-year-old man</p> <p>3 took his first dose of 50 milligrams of</p> <p>4 sildenafil citrate in the evening and within one</p> <p>5 hour sweating and a severe generalized headache</p> <p>6 developed. He saw blue 'lightning bolts' and</p> <p>7 reported blurry vision in both eyes. This lasted</p> <p>8 30 minutes, but the vision in the left eye</p> <p>9 remained blurred inferiorly."</p> <p>10 That's how you describe the case?</p> <p>11 A. Yes.</p> <p>12 Q. And then you talk about he had no</p> <p>13 erection, he didn't have sex, he tried the</p> <p>14 medication the next night with a recurrence of</p> <p>15 the same symptoms. The blurry vision of the left</p> <p>16 eye did not change; correct?</p> <p>17 A. That's the patient's description,</p> <p>18 yes.</p> <p>19 Q. So when you say rechallenge, the</p> <p>20 symptoms that he had that recurred the next night</p> <p>21 were the sweating, the severe generalized</p> <p>22 headache, and the blue lightning bolts, but the</p> <p>23 blurred vision did not change; right?</p> <p>24 A. As the patient described it, yes.</p> <p>25 But that isn't to say that there might have been</p>	<p style="text-align: right;">173</p> <p>1 Howard Pomeranz</p> <p>2 the eye chart didn't change, because it was</p> <p>3 20/20. There may have been a change in his</p> <p>4 visual field loss.</p> <p>5 Q. Can you sit here with any certainty</p> <p>6 and tell me that there was a change in his visual</p> <p>7 field between the first night and the second</p> <p>8 night use of Viagra?</p> <p>9 A. Patient certainly seemed to imply</p> <p>10 that from what he told us.</p> <p>11 Q. Show me where it says -- in this</p> <p>12 paragraph that you wrote describing this case it</p> <p>13 says that there was a worsening of his vision.</p> <p>14 A. It says that the vision in the left</p> <p>15 eye remained blurry inferiorly.</p> <p>16 Q. That's after the first night. Where</p> <p>17 does it say it changed or got worse the second</p> <p>18 night?</p> <p>19 A. It says he tried the medication</p> <p>20 again the next night and experienced a recurrence</p> <p>21 of the same symptoms. The blurry vision in the</p> <p>22 left eye persisted. A recurrence of the same</p> <p>23 symptoms means something that happened before</p> <p>24 happened again when he used the drug again.</p> <p>25 Q. You wrote, the first time you</p>

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<p style="text-align: right;">174</p> <p>1 Howard Pomeranz</p> <p>2 published this, "The blurry vision in the left</p> <p>3 eye did not change."</p> <p>4 Right, that's what you wrote?</p> <p>5 A. Yes.</p> <p>6 MS. LESKIN: This is a good time for</p> <p>7 a break for lunch.</p> <p>8 THE VIDEOGRAPHER: We're off the</p> <p>9 record. The time is 12:45. This is the</p> <p>10 end of Tape 3.</p> <p>11 (Luncheon recess from the record.)</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">176</p> <p>1 Howard Pomeranz</p> <p>2 erectile dysfunction and hyperlipidemia."</p> <p>3 Right?</p> <p>4 A. Yes.</p> <p>5 Q. And as we've talked about, and in</p> <p>6 fact you discuss it on paragraph 16, the other --</p> <p>7 that the other risk factors Mr. Grant had for</p> <p>8 NAION include hypertension, hyperlipidemia and</p> <p>9 small cup-to-disc ratio; right?</p> <p>10 A. Yes.</p> <p>11 Q. If a patient like Mr. Grant, the</p> <p>12 exact same medical history, came into your office</p> <p>13 and everything was exactly the same as described</p> <p>14 in his medical records except he did not take</p> <p>15 Viagra, what would you say -- first of all, would</p> <p>16 you be surprised by that, that a patient with</p> <p>17 those risk factors could have NAION?</p> <p>18 A. No.</p> <p>19 Q. What would you say caused his NAION</p> <p>20 in those circumstances?</p> <p>21 A. Some alteration in blood supply to</p> <p>22 his optic nerve.</p> <p>23 Q. What would that have been caused by?</p> <p>24 A. Some combination of the risk factors</p> <p>25 listed there.</p>
<p style="text-align: right;">175</p> <p>1 Howard Pomeranz</p> <p>2 AFTERNOON SESSION</p> <p>3 DR. HOWARD POMERANZ,</p> <p>4 having been previously sworn, resumed the</p> <p>5 stand and testified further as follows:</p> <p>6 THE VIDEOGRAPHER: Back on the</p> <p>7 record. The time is 1:26. This is the</p> <p>8 beginning of Tape 4.</p> <p>9 MS. LESKIN: Just for the record,</p> <p>10 during the break, Dr. Pomeranz signed a</p> <p>11 copy of the undertaking that's attached to</p> <p>12 the stipulated protective order. And we</p> <p>13 will consider that retroactive till the</p> <p>14 date of his receipt of the documents.</p> <p>15 MR. BECNEL: Thank you.</p> <p>16 EXAMINATION (Cont'd)</p> <p>17 BY MS. LESKIN:</p> <p>18 Q. Dr. Pomeranz, if you can take a look</p> <p>19 with me at your affidavit regarding Jimmy Grant.</p> <p>20 I think that's --</p> <p>21 MR. PENTON: Exhibit 7.</p> <p>22 MS. LESKIN: ??</p> <p>23 MR. PENTON: Yes.</p> <p>24 Q. If you look at paragraph 9, it says,</p> <p>25 "Jimmy Grant suffered from hypertension, anxiety,</p>	<p style="text-align: right;">177</p> <p>1 Howard Pomeranz</p> <p>2 Q. And that combination would have been</p> <p>3 sufficient in your mind to cause NAION in a</p> <p>4 patient?</p> <p>5 A. Yes.</p> <p>6 MS. LESKIN: I have no further</p> <p>7 questions of the witness at this time.</p> <p>8 We'll reserve the remaining time that we</p> <p>9 have.</p> <p>10 THE VIDEOGRAPHER: Gentlemen.</p> <p>11 MR. BECNEL: I just have one or two.</p> <p>12 EXAMINATION</p> <p>13 BY MR. BECNEL:</p> <p>14 Q. Dr. Pomeranz, you met me for the</p> <p>15 first time this morning at breakfast?</p> <p>16 A. Yes.</p> <p>17 Q. And during breakfast, we talked with</p> <p>18 you about 30 minutes at most?</p> <p>19 A. Correct.</p> <p>20 Q. We came over here?</p> <p>21 A. Yes.</p> <p>22 Q. Everything you had to say, nobody</p> <p>23 prepped you, nobody told you what to say or asked</p> <p>24 you what to put down in any reports or anything</p> <p>25 you've done if this case; is that correct?</p>

45 (Pages 174 to 177)

<p>1 Howard Pomeranz</p> <p>2 A. That's right.</p> <p>3 Q. And you have looked and talked to</p> <p>4 Mr. James Thompson, have you not?</p> <p>5 A. I spoke to him, yes.</p> <p>6 Q. And that was via phone?</p> <p>7 A. By phone.</p> <p>8 Q. And you had his records that</p> <p>9 Mr. Penton referred him to you with, some of the</p> <p>10 medical records?</p> <p>11 A. Yes.</p> <p>12 MR. BECNEL: Thank you. I have no</p> <p>13 further questions.</p> <p>14 JUDGE BORG: Miss Leskin, anything</p> <p>15 else?</p> <p>16 MS. LESKIN: I don't have anything</p> <p>17 unless Mr. Penton has questions.</p> <p>18 MR. PENTON: I have none.</p> <p>19 MS. LESKIN: We have no questions.</p> <p>20 JUDGE BORG: Thanks, folks. See you</p> <p>21 next week.</p> <p>22 THE VIDEOGRAPHER: We are finished</p> <p>23 for today. The time is 1:29. We're off</p> <p>24 the record.</p> <p>25</p>	<p>180</p> <p>1</p> <p>2 June 8, 2007</p> <p>3 I N D E X</p> <p>4 WITNESS EXAMINATION BY PAGE</p> <p>5</p> <p>6 HOWARD POMERANZ</p> <p>7</p> <p>8 MS. LESKIN 7</p> <p>9 MR. BECNEL 177</p> <p>10</p> <p>11 E X H I B I T S</p> <p>12 PAGE</p> <p>13 1 Subpoena 7</p> <p>14 2 CV of Howard Pomeranz 12</p> <p>15 3 Medical Malpractice Expert Witness 15</p> <p>16 4 Cases that have gone to trial by</p> <p>17 5 Dr. Pomeranz</p> <p>18 6 Memorandum dated April 7, 2004, to 24</p> <p>19 7 Attorneys from Pomeranz</p> <p>20 8 Plaintiff's Expert Disclosure 26</p> <p>21 9 pursuant to CPLR SEC. 3101(d)</p> <p>22 10 Affidavit of Howard Pomeranz, M.D., 34</p> <p>23 11 Ph.D, dated September, 3, 2002</p> <p>24 12 Affidavit of Howard Pomeranz, M.D., 38</p> <p>25 13 Ph.D, September 30, 2002</p> <p>14 4 Affidavit of Howard Pomeranz, M.D., 41</p> <p>15 5 Ph.D, dated February 22, 2005</p>
<p>179</p> <p>1</p> <p>2 STATE OF NEW YORK)</p> <p>3 ss:</p> <p>4 COUNTY OF WESTCHESTER)</p> <p>5</p> <p>6</p> <p>7 I, HOWARD POMERANZ, the witness herein,</p> <p>8 having read the foregoing testimony of the pages</p> <p>9 of this deposition, do hereby certify it to be a</p> <p>10 true and correct transcript, subject to the</p> <p>11 correction, if any, shown on the attached page.</p> <p>12</p> <p>13 oOo</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18 _____</p> <p>19 HOWARD POMERANZ</p> <p>20</p> <p>21 Subscribed and sworn before me</p> <p>22 this ____ day of _____, 2007.</p> <p>23 _____</p> <p>24</p> <p>25</p>	<p>181</p> <p>1</p> <p>2 (Continued)</p> <p>3 E X H I B I T S</p> <p>4</p> <p>5 9 Expert Report of Howard D. 44</p> <p>6 Pomeranz, M.D., Ph.D, Pursuant to</p> <p>7 Federal Rule of Civil Procedure</p> <p>8 26(a)(2)(B)</p> <p>9 10 Article entitled, "Can erectile 52</p> <p>10 dysfunction drug use lead to</p> <p>11 ischaemic optic neuropathy," by</p> <p>12 Howard Pomeranz</p> <p>13 11 Article entitled, "Nonarteritic 54</p> <p>14 Ischemic Optic Neuropathy</p> <p>15 Developing Soon After Use of</p> <p>16 Sildenafil (Viagra): A Report of</p> <p>17 Seven New Cases," by Howard</p> <p>18 Pomeranz, et al.</p> <p>19 12 Article entitled, "Nonarteritic 55</p> <p>20 Anterior Ischemic Optic Neuropathy</p> <p>21 and Sildenafil," by Fraunfelder, et</p> <p>22 al.</p> <p>23</p> <p>24</p> <p>25</p>

<p>182</p> <p>1</p> <p>2 (Continued)</p> <p>3 EXHIBITS</p> <p>4</p> <p>5 13 PowerPoint presentation entitled, 57</p> <p>6 "Optic Neuropathy: What are your</p> <p>7 patients eating and what meds are</p> <p>8 they taking?" by Howard Pomeranz</p> <p>9 14 February 2, 2006, letter from 62</p> <p>10 Michele Parfitt and the expert</p> <p>11 retainer agreement</p> <p>12 15 Article entitled, "The Effects of 98</p> <p>13 Sildenafil on Ocular Blood Flow,"</p> <p>14 with Murat Koksas as the lead</p> <p>15 author</p> <p>16 16 Article by Dr. Kurtulan from the 99</p> <p>17 International Journal of Impotence</p> <p>18 Research in 2004</p> <p>19 17 Article entitled, "Sildenafil Does 101</p> <p>20 Not Alter Retrobulbar Hemodynamics</p> <p>21 in Postural Variations," by Dr.</p> <p>22 Taner in Neuro-Ophthalmology, 2005</p> <p>23 18 Article by Dr. Dundar, "Effect of 2Mark.</p> <p>24 Sildenafil on Ocular Hemodynamics,"</p> <p>25 published in Eye, 2001</p>	<p>184</p> <p>1</p> <p>2 (Continued)</p> <p>3 EXHIBITS</p> <p>4</p> <p>5 23 Article by Dr. Pache entitled, 108</p> <p>6 "Sildenafil Induces Retinal</p> <p>7 Vasodilatation in Healthy</p> <p>8 Subjects," published in the British</p> <p>9 Journal of Ophthalmology, 2002</p> <p>10 24 Article by Dr. Palak, "Effects of 109</p> <p>11 Sildenafil on Retinal Blood Flow</p> <p>12 and Flicker-Induced Retinal</p> <p>13 Vasodilation in Healthy Subjects,"</p> <p>14 published in Investigative</p> <p>15 Ophthalmology and Visual Science,</p> <p>16 November 2003</p> <p>17 25 Letter to the Editor signed by 115</p> <p>18 Robert A. Egan and Howard Pomeranz,</p> <p>19 appearing in Neurology in 2002,</p> <p>20 entitled, "Transient Ischemic</p> <p>21 Attack and Stroke Associated with</p> <p>22 Sildenafil (Viagra) Use"</p> <p>23</p> <p>24</p> <p>25</p>
<p>183</p> <p>1</p> <p>2 (Continued)</p> <p>3 EXHIBITS</p> <p>4</p> <p>5 19 Article by Dr. Grunwald, et al., 103</p> <p>6 "The Effect of Sildenafil Citrate</p> <p>7 (Viagra) on the Ocular</p> <p>8 Circulation," published in the</p> <p>9 American Journal of Ophthalmology,</p> <p>10 2001</p> <p>11 20 Article by Dr. Metelitsina and 104</p> <p>12 colleagues, "Effect of Viagra on</p> <p>13 the Foveolar Choroidal Circulation</p> <p>14 of AMD Patients," published in</p> <p>15 Experimental Eye Research, 2005</p> <p>16 21 Article by Dr. Grunwald and 105</p> <p>17 colleagues, "Effect of Sildenafil</p> <p>18 Citrate (Viagra) on Retinal Blood</p> <p>19 Pressure Diameter," published in</p> <p>20 2002 in the American Journal of</p> <p>21 Ophthalmology</p> <p>22 22 article by Dr. Paris, "Sildenafil 106</p> <p>23 Increases Ocular Perfusion,"</p> <p>24 published in International</p> <p>25 Ophthalmology in 2001</p>	<p>185</p> <p>1</p> <p>2 (Continued)</p> <p>3 EXHIBITS</p> <p>4</p> <p>5 26 Article by Dr. Randall Zusman and 118</p> <p>6 colleagues, from the American</p> <p>7 Journal of Cardiology entitled,</p> <p>8 "Overall Cardiovascular Profile of</p> <p>9 Sildenafil Citrate," published in</p> <p>10 1999</p> <p>11 27 Article in 2006 Brain Research 123</p> <p>12 entitled, "Histologic and</p> <p>13 Morphometric Evaluation of</p> <p>14 Transient Retinal and Optic Nerve</p> <p>15 Ischemia in Rat," by Dr. Danylkova</p> <p>16 and Dr. Pomeranz and others</p> <p>17 28 Stipulated Protective Order 135</p> <p>18 29 Exhibit A to Protective Order 135</p> <p>19 30 Article by Howard Pomeranz and 156</p> <p>20 colleagues entitled,</p> <p>21 "Sildenafil-Associated Nonarteritic</p> <p>22 Anterior Ischemic Optic</p> <p>23 Neuropathy," published in the</p> <p>24 Journal of Ophthalmology in 2002</p> <p>25</p>

<div style="text-align: right;">186</div> <p>1</p> <p>2 (Continued)</p> <p>3 EXHIBITS</p> <p>4</p> <p>5 31 Letter to the Editor from Robert 170</p> <p>6 Egan and Howard Pomeranz published</p> <p>7 in the Archives of Ophthalmology in</p> <p>8 February of 2005, entitled,</p> <p>9 "Sildenafil (Viagra) Associated</p> <p>10 Anterior Ischemic Optic Neuropathy"</p> <p>11</p> <p>12</p> <p>13 -----TRANSCRIPT INFORMATION/REQUESTS-----</p> <p>14</p> <p>15 DOCUMENT/DATA REQUESTS: (Page/Line)</p> <p>16 33 12</p> <p>17 41 5</p> <p>18 44 5</p> <p>19 49 6</p> <p>20 51 17</p> <p>21 76 2</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<div style="text-align: right;">188</div> <p>1</p> <p>2 STATE OF NEW YORK)</p> <p>3 ss:</p> <p>4 COUNTY OF NEW YORK)</p> <p>5</p> <p>6 I, Eileen Mulvenna, Notary Public</p> <p>7 within and for the State of New York, do hereby</p> <p>8 certify:</p> <p>9</p> <p>10 That I reported the proceedings in</p> <p>11 the within entitled matter, and that the within</p> <p>12 transcript is a true record of said proceedings.</p> <p>13</p> <p>14 I further certify that I am not</p> <p>15 related to any of the parties to the action by</p> <p>16 blood or marriage, and that I am in no way</p> <p>17 interested in the outcome of this matter.</p> <p>18</p> <p>19 IN WITNESS WHEREOF, I have hereunto</p> <p>20 set my hand this 11th day of June, 2007.</p> <p>21</p> <p>22</p> <p>23 <u>Eileen Mulvenna, CSR/RMR</u></p> <p>24</p> <p>25</p>																																																							
<div style="text-align: right;">187</div> <p>1</p> <p>2 ERRATA SHEET</p> <p>3</p> <p>4</p> <p>5</p> <p>6 NAME OF CASE: VIAGRA PRODUCTS LITIGATION</p> <p>7 DATE OF DEPOSITION: JUNE 8, 2007</p> <p>8 NAME OF DEPONENT: HOWARD POMERANZ</p> <p>9</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">9</th> <th style="width: 10%;">PAGE</th> <th style="width: 10%;">LINE(S)</th> <th style="width: 10%;">CHANGE</th> <th style="width: 10%;">REASON</th> </tr> </thead> <tbody> <tr><td>10</td><td></td><td></td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td><td></td><td></td></tr> <tr><td>13</td><td></td><td></td><td></td><td></td></tr> <tr><td>14</td><td></td><td></td><td></td><td></td></tr> <tr><td>15</td><td></td><td></td><td></td><td></td></tr> <tr><td>16</td><td></td><td></td><td></td><td></td></tr> <tr><td>17</td><td></td><td></td><td></td><td></td></tr> <tr><td>18</td><td></td><td></td><td></td><td></td></tr> <tr><td>19</td><td></td><td></td><td></td><td></td></tr> </tbody> </table> <p>20</p> <p>21 <u>HOWARD POMERANZ</u></p> <p>22 Subscribed and sworn to before me</p> <p>23 this ____ day of ____, 2007.</p> <p>24</p> <p>25 (NOTARY PUBLIC) MY COMMISSION EXPIRES:</p>	9	PAGE	LINE(S)	CHANGE	REASON	10					11					12					13					14					15					16					17					18					19					
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